This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

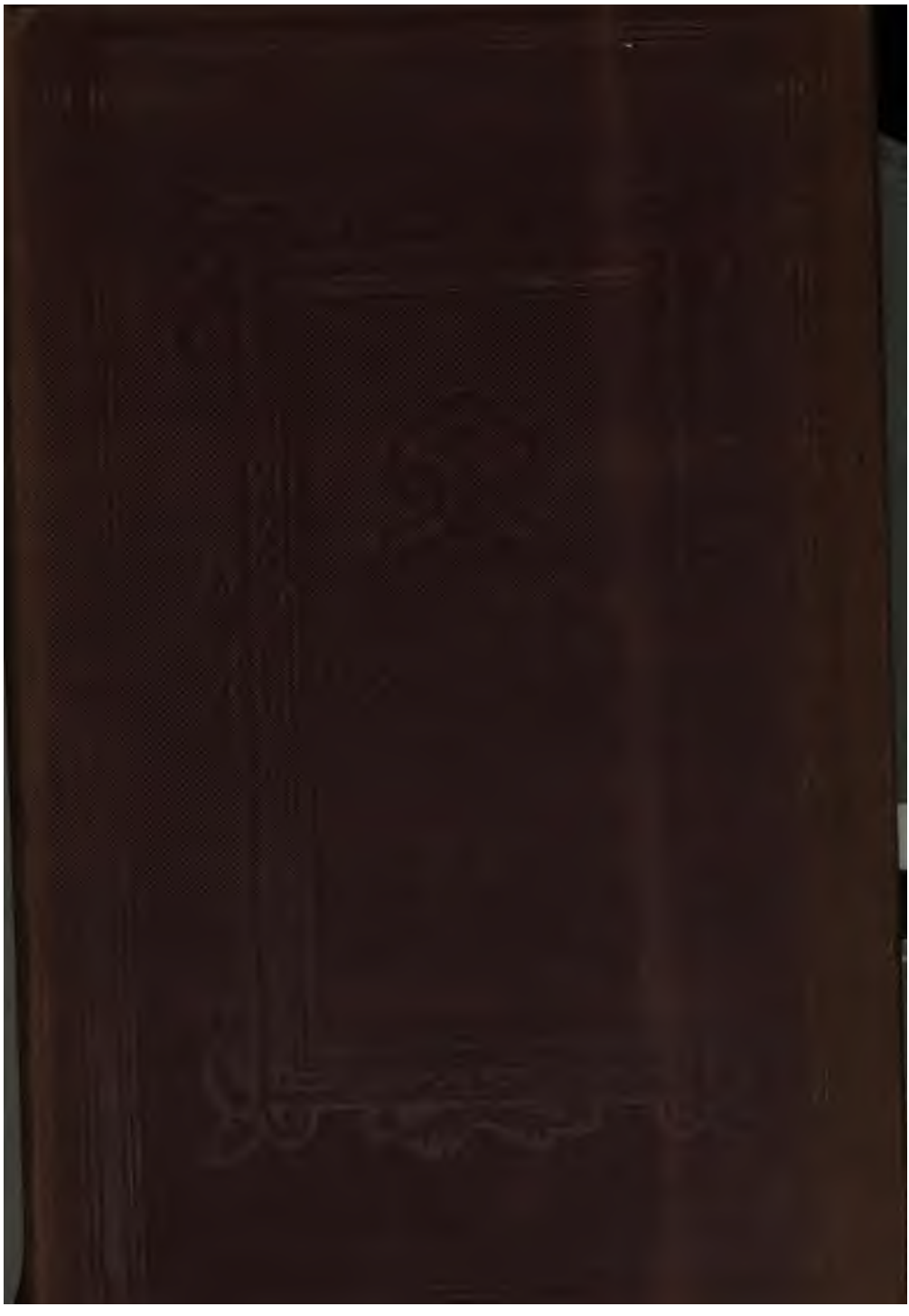
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`



38.
430.

MENTAL PHILOSOPHY.

MENTAL PHILOSOPHY:

A POPULAR VIEW

OF

THE NATURE, IMMORTALITY, PHENOMENA, AND CONDUCT

OF

THE HUMAN MIND.

BY ROBERT MUDIE.

LONDON:
WM. S. ORR AND CO., AMEN CORNER,
PATERNOSTER ROW.

MDCCCXXXVIII.

430.

W. L. GRAVES AND CO., PRINTERS, LONDON.

PREFACE.

THE study of the MIND—its nature, its capacity, its phenomena, and the full and rational assurance of its immortal duration and eternal happiness or misery after all the elements of the present body are rendered back to inorganic matter—is one of the most magnificent and important, and at the same time, in its own nature, one of the most easy and inviting departments in the whole field of human knowledge. Yet, somehow or other, it happens that of all subjects this is the one upon which even the majority of those who are not unlearned upon other matters, have the least and the most erroneous information. The unlearned are, to a man, *Fatalists*, and acquiesce in the doom which they fancy to be prepared for them, and content themselves in that state of ignorance, which they firmly believe has been meted out to them by a decree of Heaven. The learned, on the other hand, I have found to be, for the most part, *Nominalists*, following the doctrines of that sect, from the Malmsbury philosopher to Professor Stewart,—though

there are a few who take the middle course of Locke and Reid, and are *Realists* and *Nominalists* by turns, just as these two very eminent men agree the most in reality when they are at absolute variance in words.

Circumstances and associations, the details of which would have no interest to the reader, induced, nay, almost (in self-defence) compelled me to attend closely to this subject for a number of years; and it has occurred to me that a simple book, embodying some of the more important truths, in a popular form, and without any of the pretence of philosophy, might be readable, and if readable, useful.

In this volume I have, in part, put this design in execution, and have done my best to produce a book which any body can read and may understand. I have endeavoured to set forth only such truths as can be demonstratively felt by any reader who will reflect ever so little on what is read. To the *professing* critics of the day, I have little to say, and from them I have nothing to wish or expect. Those of them that are accounted more solemn because they are more slow—just as the march of the goose is held to be more majestic than the hopping of the sparrow, are gregarious, and must abide by their cliques; while the ephemera who, for their bread, must find wit in the corrupting slang of dens of thieves, and pathos in the demoralizing cant of a prurient novel, must not be expected to say anything to the purpose of a work on philosophy, however slight in its texture and faulty in

its execution. To the public, especially the junior part of them, the work is more immediately addressed; and the only request I have to make is, that they read it through and carefully. When they have done so, they may read with great advantage, and much pleasure, the lectures of the late Dr. Thomas Brown, of Edinburgh.

ROBERT MUDIE.

Winchester, Oct. 1, 1838.

ANALYSIS OF THE CONTENTS.

SECTION I.

NATURE, USES, AND OBJECTS OF PHILOSOPHY.

Explanation of Terms—Knowledge—Wisdom—Understanding—Language—Writing—A philosophic habit—Kinds of Philosophy—Material—Mental—Self-knowledge . . . . . page 1—12

SECTION II.

KNOWLEDGE OF MATTER.

Definition—Co-existence—Succession—Cause and effect—Causes are not substances—Events—Probability—Uncertainty of our judgments . 13—21

SECTION III.

MIND AS CONTRASTED WITH MATTER.

Mind not definable—Cause an illustration of it—General nature—Comparison of mind with matter—Mind not material—Sources of knowledge 22—27

SECTION IV.

GENERAL PHENOMENA OF MIND.

Error of the distinction of Intellect and Will, or of Intellectual and Active *Powers*—Consciousness—Mental identity—Immediate and reflective affections . . . . . 28—34

SECTION V.

THE EXTERNAL AFFECTIONS.

Source of those affections—Sensation, its meaning and distinctions—The general sense—Muscular feeling—Mistakes about the formation of the brain—Means of sensation—Optical deceptions—Fallacies in sensation generally—Smelling, Tasting, and Hearing—Sensation is not knowledge—Voice in animals and in man—Seeing—The eye and the camera obscura—Light and vision—Spectral vision—Sensation not mechanical—Touch—Deceptions in touch—The body a proof of mind . . . . . 35—65

SECTION VI.

AFFECTIONS CONSEQUENT TO BODILY SENSATION.

Cautions necessary — Sensibility of the body — Primary sensations — Early sensations—The infant—Self-education—The young mind—Its conduct. page 66—79

SECTION VII.

DESIRE, WILL, ATTENTION.

Relations of body and mind—The earliest thought—Mental process—Desire —Its nature—Young desire—Instinct and reason—Their difference—Animal propensity—Wish and will—Doubt, attention—Attention in animals—Signs of attention . . . . . 80—97

SECTION VIII.

INTERNAL AFFECTIONS OF THE MIND.

General proof of mind—Ideas—Their proper meaning—Illustration—Likeness —Resemblance—Cause and effect—Order of causation—Fact—Invention—Fallacy of the common notion of genius—Discovery—Discovery and invention—Imaginary and real inventions . . . . . 98—119

SECTION IX.

MENTAL STATES—REFLECTIONS ON SOME RELATIONS OF MIND AND BODY.

Mind has no powers—Idea of power—Quality—Subject—Substance—Internal and external, as of the mind—Our knowledge of mind—All knowledge acquired—Suggestions of former thoughts—The body ignorant of itself—Immateriality and immortality—Resurrection of the body—Memory of thought and action—Ascendancy of the animal—Mental degradation—Madness—Crime—Passion—Ungovernable passion—Romance—Death of Beaufort—Final despair—Religion . . . . . 120—150

SECTION X.

SUGGESTION.

Simplicity of the study of our mental states—Source of obscurity concerning them — Figurative language — "Think" and "Thing" — "Thing" and "Fact"—Error respecting memory—There is no *power* of memory, or of association—Mistakes concerning ideas—Proper meaning of ideas—Mental analysis only virtual—Meaning of suggestion—General notice of suggestion —Kinds of suggestion—Analysis of the term . . . . 151—168

SECTION XI.

SIMPLE SUGGESTION.

Primary cause of suggestion not known—Opinion of Dr. Brown—Primary and secondary laws—Resemblance—Contrast—Nearness—Examination of resemblance—Resemblance in language—Poetry—Children are poetical—Illustrations—Homer—Burns—Contrast—Hume's absurdity on that subject—Causation as a means of suggestion—Comparison—It involves a relation—Contiguity—Memory—Simple memory—Technical schooling page 169—192

SECTION XII.

CIRCUMSTANCES WHICH MODIFY SIMPLE SUGGESTION.

Two classes of modifying circumstances—Genius, its peculiarities and fate—Aptitudes of the body—Distinction of mind from matter—All minds are originally equal—Genius is acquired—Influence of time and novelty on suggestion—Proximity in time—Trivial thinking—Youth in age—All thought and all suggestion is relative—Thoughtlessness—Simple consciousness—Progress of man and society—Idolatry natural—Education—Influence of novelty—Mental equality . . . . . 193—225

SECTION XIII.

RELATIVE SUGGESTION.

All mental states relative to causes—Comparison not a power—Value of the knowledge of relations—Illustration of the cone and its sections—The tetrahædron—Application of these—The hyperbola—Hyperbolic arches—Poetry—Abstract thought . . . . . 226—246

SECTION XIV.

CO-EXISTENT RELATIONS.

Mental co-existence only virtual—Compound perceptions—Language of the passions—Love-letters—Relations of position—Definitions—Localization—Importance of maps . . . . . 247—255

SECTION XV.

SUGGESTIONS OF RESEMBLANCE OR DIFFERENCE.

Generalization—Comparison not sensal—Process of comparing—General ideas and general terms—Mistake of Locke—Source of the common error—Analysis of the process of generalizing—Ridiculous doctrine of "types"—Advantages of general ideas—Their vagueness—Words and their subjects—Words originate no knowledge—Value of words—Varieties in the same language—Slang—Grand error respecting general ideas and terms—Realism—Nominalism—Complication—Errors of philosophers—Thoughts of immortality—Danger of Nominalism—Relations of matter . 256—307

SECTION XVI.

RELATIONS OF SUCCESSION.

How they differ from those of co-existence—Causation the most important—It is not mere sequence—Physical causes and effects—Illustration—Causation not definable—It must be observed—The superstitious—The Alchymists—The "Weather Almanac"—Misapplication of causes—Errors—Causes mentally perceived—Advantages of the mental process—Use of the mind . . . . . page 308—331

SECTION XVII.

THE PROCESS OF REASONING.

Importance of this part of the subject—Inductive reasoning—Syllogistic reasoning, a means of discovering truth—Illustration—The Houses of Parliament—Foundation of correct reasoning—Apparent decline of reasoning—Demagogues—Eloquence and reasoning—Illustrations—Proper use of reasoning—Mode and application of reasoning—Reasoners—Lord Brougham—Tierney—Extempore speakers—Reasoning in general—Importance of secondary relations . . . . . 333—348

MENTAL PHILOSOPHY.

SECTION I.

NATURE, USES, AND OBJECTS OF PHILOSOPHY.

THE name PHILOSOPHY literally means "the Love of Wisdom," or that disposition of human beings which induces them to seek wisdom as one of their chief occupations and pleasures. This is the original and *active* sense of the term; but it is also used in a *passive* or *substantive* sense, as a general name for wisdom itself and the subjects of wisdom, whatever they may be.

In the active sense, as expressive of the love of wisdom, there is only one kind of philosophy, because whatever the object may be, the love of it is the same. But in the passive sense, there may be as many kinds or departments of philosophy as there are subjects, or classes of subjects, respecting which human beings desire wisdom.

It is in the substantive sense that Philosophy is used in this work, and in every work, large or small, which is written upon any department of philosophy. For, though the love of wisdom may be excited by a book, yet, being merely an affection of the mind, it cannot be embodied in

a book, or taught by means of one, with whatever ability and love of the subject that book may be composed.

In whatever sense the word "philosophy" is used, "wisdom" forms the essential part of it; and therefore, in order that we may understand what Philosophy means, we must have a clear and accurate understanding of the meaning of Wisdom. Every one will admit, without any explanation or argument, that wisdom is knowledge of some kind or other; because, in a state of utter ignorance, or where there is no knowledge, there can be no wisdom, neither can there be folly, which is the opposite of wisdom. But, although knowledge is essential to all kinds of wisdom, wisdom is not necessarily connected with all knowledge; and it is in this distinction that we are to seek for our definition.

Knowledge is a term of very extensive meaning; and, being such, it is exceedingly vague and indefinite. It may be the knowledge of good, or of evil: it may be true, or false: it may be useful, or useless, or even injurious; and it may lead to wisdom, or to folly. *Wisdom*, on the contrary, whatever may be its subject, is always good, and true, and useful. Every kind of living and growing substance or being is, in all probability, endowed with some capacity for acquiring knowledge, though we cannot understand in what the faculty consists. Plants display singular efforts in getting at nourishment, and light, and all else that is essential to their health and growth; and they often overcome very powerful resistances in the accomplishment of these objects. The roots of a tree accidentally planted on a cliff, or the top of a wall, will creep downwards many yards till they reach the soil at the bottom. In other situations they will enter the fissures of rocks, and heave asunder masses of many tons in weight. Pine trees, which spread

their roots over the surface, often exhibit a curious resource when that surface is removed: the tap-root strikes downwards, puts out a new whorl of lateral roots, and soon acquires a thickness approaching that of the lower part of the stem; and after the tree is duly rooted upon the new whorl, the exposed roots wither away. There are some remarkable instances of this in the Scotch firs close by the side of the road, on the descent from the sandy downs of Guildford towards Farnham. In all these, and in a vast number and variety of other cases which might be mentioned, there is unquestionably a kind of knowledge—a capacity of adaptation to circumstances, though it would be absurd to say that there is the slightest indication of wisdom.

If we turn our attention to the animated creation, we find the indications of knowledge still more striking. "The ox knoweth his owner, and the ass his master's crib;" and the resources of the wild animals in avoiding dangers and enemies, and finding their food and all else which is essential to their well-being, are so accurate and admirable, that they are the theme of much eulogy, and many have not hesitated to attribute to them something very analogous to wisdom — similar in kind, though lower in degree than in human beings. This, however, arises from a fallacy — a reasoning from a false analogy; for although they certainly have knowledge, and even what we call *memory*, not one of them exhibits the slightest display of wisdom, in the proper sense of the term—the only sense in which it ought to be used.

When we advance another step, and come to the human race, we find in them a very great deal of knowledge quite unconnected with wisdom, namely, all our simple knowledge of facts, whether we acquire it by the direct use of our own senses, or are informed of it by others, through

the medium of spoken language, or of books. Our senses are really passive: and, whether it be any of the allocated senses which have specific organs—as the eye for seeing or the ear for hearing, or that more general sense of the living body of which all the others are merely modifications—if the proper stimulus is applied, the sense can no more refuse the impression than a flaxen thread can refuse to be burnt by flame, or a lump of lead refuse to sink when it is cast upon the waters.

In consequence of this, there may be, and there actually is, a vast deal of knowledge in which there is not a single iota of wisdom; and so far from the number of facts of which any person has the simple knowledge being the measure of that person's wisdom or philosophy, the two are often in an inverse proportion—the more facts the less philosophy; though there can be no philosophy without the knowledge of facts. Innumerable illustrations of this will occur to almost any reader. An eclipse of the sun, or any other natural phenomenon, is, for instance, seen by two persons, one of whom is acquainted with the elements of astronomy, and the other is not. They may both see it equally as a mere object of sense, or the ignorant person may see it much better than the other — from more acute eyes, or a more favourable view. But, however perfect his vision or favourable his situation, he sees nothing but what is before his eyes. It is an isolated event; consequent to nothing, antecedent to nothing, and leaving no impression but the simple fact that it has been seen—which is no doubt knowledge so far as it goes, though certainly it is not wisdom. To the astronomer, the eclipse is very different. He knows that it is the result of a certain position of the moon at the time of change, and he can calculate at any length of time beforehand the moment of its oc-

currence, and the time and extent of the obscuration as seen from any spot upon the earth's surface at which it happens to be visible. Farther than this, the astronomer knows that the eclipse is simply a phenomenon of the sun and moon, having no influence on the earth's inhabitants, or any thing upon the surface of the earth: whereas those who are ignorant of its cause, are very prone to look upon it as an omen portending some direful effects to men or nations; and there are instances on the record of history, in which an eclipse produced fully more alarm than the inroad of a hostile army.

The ignorant man merely *sees* the eclipse; and if he does not see it, nor is told of it by others, he remains in utter ignorance of its occurrence; while the astronomer knows of its coming, and can describe it with equal accuracy whether he sees it personally or no. He *understands* it; and it is in this understanding, in addition to the mere fact of perception by the senses, or any of them, that the difference between wisdom and simple knowledge consists. The distinction between the two is the same in every case, let the information from without come through the medium of what sense it may. It may be observed or felt, it may be heard, or it may be read; and though there are some differences between the communication, or reception, of a fact by each of these three modes, the knowledge of a fact by any of them may be either simple, leading to nothing, or it may be accompanied by wisdom, and as such be matter of philosophy.

The direct use of the senses is purely an individual matter, and would be possessed by a perfectly formed human being, though there were only one such being in the world, and that being were, as he would of course be, wholly destitute of the use of language. Robinson Crusoe, or Alexander Selkirk, his prototype, had the use of his

senses when he was alone in the island, as completely as after he had learned to converse with his man Friday.

Language implies the existence of society; and it is doubtful whether the very rudest state of society can exist without some glimmering of wisdom, however faint and feeble that may be. Hence, there may be more of good, or of evil, according to circumstances, resulting from what we are told, than from what we personally observe. The communicated information excites, to some extent or other, a higher faculty than any which is necessarily connected with mere sensation. There is the mere sound of the words, and there is the conventional sense in which those words are used, which last has nothing to do with immediate sensation; and this is a secondary or internal knowledge, and so far as it goes it must either lead to truth, or mislead to error. In very ignorant states of society, error is the most frequent result, in all cases in which there is not an immediate appeal to the senses as a means of correction; because, upon every subject there is only one truth, from which every deviation is error; and as they who have no guide are thrown upon what is usually called "the doctrine of chances," the chance of being wrong is almost as infinity to one, to that of being right. To save us from the danger of this most disadvantageous chance, and give us at least an approximation to certainty instead of it, in all cases where we have no guidance of the senses, and also in those in which the senses would mislead us, is the object and use of wisdom, or philosophy. It by no means follows that philosophy shall in all cases have this beneficial effect, or that it shall have it completely in any one case; but this is the purpose for which the faculty of acquiring it has been bestowed upon us by our all-bountiful Creator.

Written language rises a step higher, and implies the existence not merely of society, but of a considerable degree of improvement in that society; and therefore, though it follows the same general law as spoken language, it carries that law a good deal farther, and may be productive of greater good or greater evil, according to circumstances.

The more generally that written language circulates—and we may consider printing as merely a greatly improved mode of writing—and the more permanent that it becomes, its fertility as a source of good or of evil increases in proportion; though the good increases much more rapidly than the evil, because they upon whom the good tells, act much more powerfully upon the others, than the others react upon them in return. The reason of this is, that the ignorant take up the conclusions and opinions of the better informed: and although this second-hand wisdom is in itself inferior to that which people work out for themselves by their own conviction, and though ignorance and intuition produce many erring guides; yet it is the best substitute that has hitherto been found.

But this advantage is to the progress of society generally, rather than to the relative conditions of the individual members of that society; for persons who are not wise, that is, who are not capable of forming philosophical conclusions, are relatively, as compared with those who are more philosophical, the worse, and the more helpless in their condition, the more advanced the state of society. Among savages in a very rude state, there is no philosopher to be found, but neither is there any fool; for all possess the cunning and the other natural resources of the savage. Their wants are all physical, and so are their differences; and before one of them can guide or govern another by

means of anything to which the name of wisdom can be applied, society must have made considerable progress among them. If we turn to the traditions of the fabulous age of any country, be it what it may, we invariably find that the distinguishing characters of the leading men are gigantic stature and more than ordinary strength, with a very scanty portion of what we call either wisdom or virtue. As society advances in improvement, and the resources and enjoyments of mankind differ more and more widely from those of mere animals, physical superiority loses its hold, and wisdom, or at all events mental stratagem, becomes the governing power. At what stage of society this may become the province of philosophy, or whether it ever has or ever will become so, are points which it is not necessary and would not be easy to determine; but there is no doubt that, when knowledge is advancing and bringing its train of beneficial consequences along with it, augmenting in number at every step of the progress, that progress is toward a result of this kind, although, like perfection in every thing human, it is probably a result which never can be reached, — though that is no reason why every one should not exert himself to approach it as nearly as possible.

A time of rapid progress in this way is always of necessity a time of great activity, and of severe labour with the hands, with the head, or with both, to the great body of the people; and they who will not take their part in this, must stand still while others are advancing, which is tantamount to actual retrogression when society is stationary. Hence, in rapidly advancing states of society there is much less time for deliberation, either with a view to the discovery of causes, or the forming of judgments as rules of action, than there is when society is sluggish or

stationary. There is also less time for seeking counsel, and less chance of obtaining it, as every one has quite enough to do for himself. All these considerations, and many others which will suggest themselves without being directly pointed out, tend to prove the great importance of endeavouring to produce a philosophic habit, especially in the young, at times when the improvement and the activity of society are more than usually energetic. There are more facts to be known, and more actions to be done at such a time; and as the philosophy does not appear on the surface, or at the first glance, as these do, it is apt to be neglected; and the loss to those who suffer from this neglect is not the less severe that they themselves are not aware of it. Very many of the misfortunes and follies, and not a few of the crimes which so chequer society, are occasioned by the want of a philosophic habit; for were they who suffer for these—and who is there that falls into any of them without in some way or other suffering in the end —were they to form an accurate judgment, so as to see that end from the beginning, they would remain safe, or, at all events, yield only to much stronger temptation than suffices to involve them in ruin when destitute of that habit by which alone they can arrive at the proper conclusion.

There is another evil resulting from this want of a philosophic habit, as the certain means of knowing causes and forming a sound judgment on effects, which is certainly more conspicuous in a public point of view, and probably not less mischievous on the whole, than the one that has been mentioned: besides being individually the dupes of their own silliness, people who have no philosophic habit become individually and—from a curious sort of infection—in the mass, the dupes of the craft of others. The English nation, unquestionably the most active and

the most improving nation on the face of the earth, has so long been remarkable for this, that England has received the name of "the paradise of quacks;" and perhaps the appellation was never more truly expressive of the fact than it is at the present time, when people of all ranks and classes are lavishing countless thousands of pounds upon speculations, about the results of which the projectors notoriously neither know nor care a single rush, provided they can succeed in fleecing their silly and unreflecting dupes. The mere possession of what usually goes by the name of philosophy, would probably not tend much to the correction of this, because it is, in many instances, one of the convenient adjuncts or auxiliaries of imposture; but the capacity of forming an accurate judgment, if persevered in until it became a habit, would unquestionably be attended with the most beneficial effects, at the same time that it is the surest and shortest means of success, in all matters wherein the promise justifies the attempt.

These remarks apply to wisdom or philosophy in the active sense; and they have been made, because, as has been hinted, this does not admit of being substantively treated as a branch of education; though there is one branch of substantive or, at all events, of subjective philosophy, which bears very closely upon it; — namely, MENTAL PHILOSOPHY, to which we purpose to devote the remaining pages of this volume.

Of grand divisions of substantive philosophy, that is, of the subjects of philosophical inquiry, as portions of general education, and without any immediate view to particular practical results, farther than by preparing the mind for all results, there are two,—*Material Philosophy* and *Mental Philosophy*, or the Philosophy of the *Subjects* of wisdom, and the Philosophy of the *Instrument* of wisdom. The first

of these includes the whole of the material creation and its agencies and laws, from a sun and system of planets — the most stupendous subject of this philosophy — to the most minute particle of simple matter, which is imagined rather than understood. The second includes only the mind of man: but as we know nothing of mind except what we feel, and as these feelings cannot be communicated except through the medium of the body, we are unable to separate the philosophy of mind, and thus our knowledge of it is much more vague than our knowledge of that of matter, which upon many points is vague enough.

Indeed, it is only as connected with matter, that our philosophy can arrive at any knowledge of mind; for until direct revelation came to the aid of philosophy, the existence of mind, as essentially different from matter, was very obscure, and the fact of its immortality was a fond wish rather than a fully established truth. The "shades" spoken of by the ancients were not minds, but *substanceless bodies*, yet visible to the eyes of certain favoured mortals — fancies of the imagination wandering after the truth, but not arriving at it, the existence of which was a contradiction and absurdity. Popular prejudice, with which error lingers long, has in this matter conspired with false philosophy in vitiating the philosophy of the mind, and holding it up to the aversion and derision of those who are ignorant of it, as *metaphysics*, and various other hard names, supposed to denote a subject which cannot be understood, and which would be of no use to the world if it could.

Nothing can be more erroneous than this, or more prejudicial to the formation of that philosophic habit which is so useful in the acquiring of knowledge and the conduct of human life. It is, in fact, the first step of obedience to the

counsel of "know thyself," which is given both in the sacred volume and by one of the most profound of the sages of antiquity. It is true that it may be made difficult, and has been so made—as what branch of knowledge has not?—by improper modes of treating it, and by endeavouring to push it beyond the limits of knowledge in which there is wisdom. But within those limits it is a plain and pleasant subject, not above the comprehension of any person, even of moderate capacity, who has had but a little practice in thinking; and it is difficult to say whether it is more delightful in the pursuit, or more profitable in the application.

SECTION II.

KNOWLEDGE OF MATTER.

As, for reasons which will afterwards appear, we are obliged to make frequent references to Matter in our attempts to understand the operations of Mind, some slight knowledge of what we can generally know of matter must precede the mental inquiry, even in the most simple and elementary way in which that inquiry can be treated.

MATTER literally means that of which all things which are of such a nature as that they can or could be perceptible by any of our senses, are made; and the only general property which we can understand as belonging in common to all matter, is that of having gravitation, or weight, by means of which every piece or portion of it has a tendency to move toward every other piece; and it always obeys this tendency, unless prevented by some opposing means.

Of matter, taken generally, we have no farther knowledge than this; for all the matter which we can in any way examine and know, belongs to, or forms the subject of, some particular body—as a mineral, a vegetable, an animal; or something to which we give a particular name, and distinguish it from the others by its own peculiar qualities. When, therefore, we use the word "matter" in a practical or useful sense, we mean the substance

and material of all bodies having gravitation or weight, without reference to the particular nature of any one of them. For our present purpose it is not necessary that we should mention the particular properties of every one kind of matter; we want merely so much of the general knowledge as shall enable us to see the distinction between matter and mind.

The appearances or phenomena of material bodies, and the means and modes by which particular appearances are produced, or changed, are all that we can know concerning matter; but these are quite sufficient for our purposes, whether in the obtaining of materials, or in the converting of these materials to purposes of practical usefulness.

There are two distinct ways in which we may study the appearances of one, or any number, of the bodies which compose the visible world around us, and which we call the system of material nature. We may study them as if by a mere momentary glance, without any reference to their former or their future state or appearance, which is called studying them as *co-existent*, or existing together; and we may also study them during a portion of time, longer or shorter, which is called studying them in their *succession*, or in the order of the changes of their appearance, as these take place, either naturally, or by any of the operations of art.

The study of Co-existence, regarded merely in itself, is a very simple matter; but there are *relations* of co-existence, which not only amount to knowledge, but are a very important branch of it.

Relation literally means "laying things side by side" with each other; and when this is done by actual experiment, by words, or by thought, some knowledge results from it; for it is seen in what the subjects agree and in

what they differ; and it is in this way that we learn to know and discriminate one thing from another.

The study of Succession is a much more important one than that of mere co-existence; because it brings under our consideration other subjects besides the mere appearances of things, and their agreements or differences. We cannot look very long at any object, or number of objects, be they what they may, without perceiving some change in their appearance. Thus, the sun is the most conspicuous object that comes within our observation, and we do not see the sun for any two consecutive moments in the same position. The sun rises in the east, passes the south at mid-day, and sets in the west, every day; but this also is done with differences, for the time of rising and setting, and the height above the horizon, are not the same for any two days which immediately follow each other. There are these changes; and we can no more imagine a change to produce itself, than we can imagine the same thing of a piece of matter.

This offers a new subject for our consideration, namely, that of *Causes*, or the production of changes; and we call the changes the effects of those causes; and the order in which we observe them to take place, we call the law, or the succession of cause and effect.

This Cause and Effect is a matter of some difficulty, and one upon which we are liable to fall into mistakes, if we are not all the more careful. A Cause means "that which acts," or that which possesses what we call a Power, or a property by means of which it can act. Thus the light is the *cause* of objects being visible to us; because the light has the *power* of rendering them perceptible to our eyes; and their not being so perceptible is the *cause* why we do not see them in the dark.

The reason why there is so much difficulty in the right comprehending of what we call causes, and the powers which causes have in producing changes or effects, consists mainly in the fact that we have no instance, and consequently can have no knowledge, of any cause or power, as a separately existing material substance, which we can examine by itself, so as to find out its properties. The cause and the power are merely matters of succession, and known only in and by the changes or effects which they produce: we can, judging from their effects, compare causes with each other, and distinguish them as similar or dissimilar, as strong or weak, or a number of other distinctions; but of any single cause we can know nothing more than what we learn of the effects which it produces.

For this reason, we cannot look upon causes and powers as any part of the material creation considered as *substance*, or matter, though substances are the means or instruments by which causes produce their effects. Therefore, they furnish us with a sort of subjects of observation and thought, which are, so to speak, intermediate between matter and mind, and serve us in passing from the study of the one to that of the other.

These causes are absolutely innumerable; and to their operations are owing all the differences which appear in the several substances which compose the visible creation, in all the appearances which these present, and in all the changes which they undergo. Every variety which we perceive in the heavens, the air, the earth, or the waters, or in any one of their component parts or inhabitants, every change which marks the day, the year, or any one varying period of succession, and every difference of feeling which we have in ourselves, we invariably impute, and cannot help imputing, to some cause. We cannot go where

the traces of causes do not meet us on every side; for the rock which we fetch from the deepest mine that has ever been reached, does not appear to be an original, but a product, taking its characters from some causes, known or unknown to us, which have been at work upon it, and left the appearances which it presents as the effects and proofs of their action.

These causes, which thus meet us in every thing, in every place, and at all times, belong to the material creation equally in its co-existence and in its succession; and the knowledge of them and of their effects forms by far the most extensive and valuable part of our knowledge—the only part which is worthy of the name of philosophy or wisdom.

That things are what they are in co-existence, is owing to causes, which placed them in the situation in which we find them, and gave them all the appearances which they present to our observation. It matters not whether the things be productions of nature without the interference of man, or productions of human art; for every thing that they exhibit is the result of a cause, and every variety the result of a different cause, in the one case as well as in the other.

It is the same in cases of succession, or "*events*" as we call them,—that is, whatever happens or comes out. The word "event" of itself points out the difficulty and uncertainty which we are in regarding the nature of causes,—that is, what they are in themselves, and without reference to the effects which they produce, or the substances in which the action and effect of the cause appear. Event, literally means that which is "of, or produced by, the wind;" and it is worthy of remark, that this same term "wind," is identical with those which signify breath and life and

spirit. The wind is invisible in its substance, and, to ordinary observation, uncertain and indefinite in its motions; and as there is a similar obscurity and uncertainty about all those actions for the causes of which the name of the wind has been figuratively applied, the application is far from being an unnatural one.

As no material substance can be, in itself, regarded as a cause, we are in the habit of viewing events in the relation of causes and effects—the antecedent, or event which precedes being the cause; and the consequent, or event which immediately follows it being the effect—"effect" meaning merely that which is "made out" or takes place. When we call an event an effect, however, we always have some allusion to one immediately preceding it as a cause; and, though we cannot explain very well in what it consists, almost in any one instance, we have always a feeling that there is some more intimate connection between every cause and its effect, than the mere fact of the one immediately preceding, and the other immediately following.

Were there nothing but the mere sequence, then any one event might be considered as the cause of any other,—as for instance, the morning dew, which forms immediately before sun-rise, might be considered as the cause of the sun's rising, an event on the occurrence of which it has not the least influence; and the mere fact of one's being watching to see it, might be called the cause of an eclipse of the moon;—in fact, any two events, how totally soever they might be unconnected with each other, might be ranged as cause and effect.

The mistaking of this mere sequence in time for causation, is the source of by far the greater number of our errors and failures; and thus it becomes a very important matter to ascertain in what cases there is causation, and in

what there is none; and the only guides which we can have in this matter, are observation and experience.

This experience does not amount to an absolute certainty, even in those cases in which we place the greatest dependence upon it,—as in those of the rising and setting of the sun, the seasons of the year, and their influence upon the productions of the earth. It is true that in such cases we never have any doubt, because we have never observed any failure in the succession; but still it is not an absolute certainty; for a time may come at which the sun shall cease to rise and set, and the seasons of the year to follow each other in their succession. The probability is that no such event will occur during the time of our continuance upon earth, because it has not occurred in that of any of the generations which have gone before us: but still, though this is a strong probability, it is only a probability, and not a certainty. An absolute certainty would require an infinite number of cases without failure in any one of them, and this is what we cannot by possibility obtain; but the more the cases are, and the fewer the failures, the probability is always the stronger.

There is another circumstance which often perplexes us very much on the subject of causation; and that is the complication of causes, which often operate jointly in the producing of an event which no one of them can produce without the others. The germination of a grain of wheat, or of any other corn, seems a very simple matter, and there are countless millions of examples of it in the British islands every year; and yet it is the result of no inconsiderable combination of causes, and causes, all of which have been at work in their succession since the creation of the world. In the first place, there is the whole action of the plant of the former year, by and upon which the

seed is produced — the germination of a former seed, the expanding of the leaves, the rising of the culm or stem, the developement of the ear with its fertilizing and fertilizable parts, the action of these upon each other for the impregnation of the germ, and the growth and ripening of the grain. This is rather a complicated process, but it is only a part of what has to be done, in order that the new plant may germinate. That must have an appropriate soil, with the requisite degree of heat and of moisture; and these must be brought into action at the proper season. Not only this; for the seed, as the plant which it is expected to produce is an artificial one, to which no corresponding type can be found in wild nature, is really, in so far, dependent upon human culture, and must have that culture kept up, otherwise it will degenerate. Each of these may be regarded as a separate cause; and if the causes are so many in the simple germination of a seed, we can readily understand what they must be in cases of greater intricacy.

It is this complication of causes which perplexes us so much in all our reasonings and conclusions with regard to cause and effect, even in the material creation: and from this we can readily understand that the difficulty must be much greater in so subtile a case as that of mind.

The general maxim upon which we proceed in all our philosophy is that, when the circumstances are alike in any two cases a like result must happen in them both; and if the one has already happened, so that the result of it is known, and the other has yet to happen, we can make sure of the future one by applying the knowledge which we have of that which is past. This appears simple enough in the statement; but still there is a difficulty in it.

We cannot know, in any one case which we are acquainted with, all the circumstances upon which the result depends, neither can we be certain that those which are unknown to us may not be the essential ones upon which the result depends; but still this reasoning from experience is all that we can by possibility obtain, and for all ordinary purposes it is found to be quite sufficient.

The philosophy of matter consists of many departments, as the forms in which matter appears, and the laws which it is found to obey, are very numerous and varied: but the few remarks which have been made are sufficient to put us in the way of seeing the difference between mind and matter, and also how we can proceed from the philosophy of the one to that of the other.

We shall only observe farther, that the causes which immediately act in the material creation, do not appear to act except through the instrumentality of some kind of matter, and when that matter is in some particular state. While it is in this state, these cauess are capable of displaying their energies when the matter in which they appear is placed in the circumstances which are favourable to their action. But whether they exist always, or are excited only by the circumstances under which they display their energies, we cannot tell.

SECTION III.

MIND AS CONTRASTED WITH MATTER.

It is difficult to give any definitions of mind, except negative ones, or those which mention what it is not rather than what it is; and in this negative definition of it we must take matter as the standard of our comparison.

Now, mind has not one of the properties of matter, either general as applied to the whole of matter, or particular as applied to the several forms under which it appears. Mind has no gravitation or weight; we cannot even imagine it as occupying any portion of space, or as being composed of parts into which it can be separated by any means whatever. As such, it is perfectly independent of the action of all material agents, at least in so far as its abstract nature is concerned. It can suffer no decomposition; it can undergo no death; no effort can fatigue it; and no material obstacle can stop its progress. It is the instrument of thought, and the recipient of knowledge; and farther than this we can say very little of a positive nature respecting it.

Causes are the portion of the material world which have the most resemblance to mind; and in them it is only a slight resemblance, and not a similarity. We know nothing of the nature of a cause, further than the effects which

that cause produces; and we know nothing of a material cause unless in connection with that particular portion of matter in which it is displayed. In like manner, we know nothing of mind beyond its effects, or the states in which it exists; and, excepting what we feel in ourselves, we know nothing of it save what is manifested through the medium of a human body.

The human body, and every thing else that is material, occupies space; and requires not only time, but an effort —the exercise and exhaustion of some power or force, in order to pass from one portion of space to another, however short may be the distance between them. All these things have, too, in the case of matter, certain and definite laws of proportion, from which there cannot be the slightest departure. The quantity of matter, as ascertained by its gravitation or weight — the only way in which it can be estimated—is the standard in these proportions; and in the case of any one portion of matter, to which we must always resort in order to have a practical illustration—a case that we can bring directly to the test of the senses—this quantity of matter is not and cannot be changed, either by nature or by art. It may be altered in shape or in size, or it may be altered in state—that is, it may be solid at one time, liquid at another, in vapour at a third, and converted into one or more species of gas or air at a fourth; but in any or in all of these changes, though they should be repeated a thousand times over, the quantity of matter is not increased or diminished by one single particle; and we know of no means of increase but by adding new matter, and none of decrease but by taking away part of the old.

Vegetables and animals, no doubt, grow or increase in size; and the latter especially have the power of repairing the structure of their bodies; but in no one case is there

any original production of matter by any one of these creatures. That matter must be obtained from food of some description or other, which they are capable of assimilating, or converting into the substance of their bodies. And this power of assimilation, and the life of which it is one of the functions, are only temporary; and, sooner or later, life and all its functions cease, and the body of the plant or the animal returns again to the condition of mere matter. But even in these transfers of matter, whether from the dead to the living, or from the living back again to the dead, the quantity of matter is not in the least altered. There are countless thousands of natural powers continually at work upon it, and changing its appearance into all those varieties which lie every where around us; but though, during the appointed time of each, matter is more plastic and passive to it than the clay is to the hand of the potter; yet this matter maintains its ground, and in the end triumphs over them all; nor does it, amid all their activity, change its quantity, as measured by gravitation, even by the millionth part of a single grain.

This gravitation or weight of matter is just as stubbornly constant in its resistance of motion, as the force or power which is required to shift it from one place to another. To move a certain weight of mattter, over a certain distance, in a different direction from that in which its own gravitation would carry it, requires a constant power for any one given time of performance; and if we would have this time lessened, we must increase the power or diminish the weight in the same proportion.

For instance, the carrying of a hundred-weight from London to Birmingham is one certain and definite work to be done; and must always require the same effort, in how many ways soever that effort may be varied. For a man to

carry it on his back, is employing the weakest power that we can resort to in practice, and it is the only one which human beings can command in the lowest state of society or of poverty. The pack-horse, the coach, and the steam-train on the rail-road, follow in succession; and as in each of them the power is greater than in the preceding one, they can do the work in a shorter time, but the effort required is in all of them exactly the same.

From this invariable trammel of weight, the mind is entirely free; and, therefore, neither time nor distance is an element in its movements. "As quick as thought," is an expression known to every body, though there are many who have no notion of this quickness. Thought—and thought is all that we know of mind—can pass round the earth, through the centre of it, to the sun, the planets, and to every star, in less time than the finger can move a hair's breadth. The passage from thought to thought,—which is merely the mind passing from one state to another, is so rapid, that the whole appears to have one unbroken succession, in which not the least pause can be felt.

In this consists one of the greatest advantages which the mind possesses over material nature whether living or dead. The bodies of animals are wonderful structures; and the operations which they can perform, as well as the adaptation of their organs to the performance, are above all imitation and all praise. But still they are all only of partial application: one is adapted for climbing trees; another for walking on the ground; a third for flying in the air; a fourth for swimming in the water, and so on, in countless degrees and modifications of all these. But in proportion as they are well adapted for one, they are ill adapted for all the others; and beyond the performance of those functions for which their organizations adapt them,

they have no means of acting. In all of them, the performing of the function wears the structure; they must rest to recover themselves, and at last they must die.

Mind, on the contrary, is universal and indefatigable. There is no limit to what it *may* know; and it is never fatigued; for thought increases the faculty of thinking, and the more that a man knows, he has the more facility in making fresh additions to his knowledge—a man of information and thinking can master in a moment a subject which would defy an ignorant man for the whole term of his life.

This alone is ample proof that the mind is not material; for if it were, it could not be moved without an apparatus and an effort, such as are required to move all bodies: it would get fatigued in the using, and if it had capacity in space, as all material existences have, that would at last become filled, however large it might be.

We are in the habit of saying, indeed, that "a man's head" (by which we mean his mind) "is filled" with sense or nonsense, as it may happen; but this is a figurative expression, for we merely mean that the man's thoughts run in particular trains, or upon particular subjects, which is more or less the case with all men. This fact of the thoughts recurring in particular trains, the causes of which are often unknown to us, leads to the common notion, that genius, and particular kinds and degrees of genius, are born with particular individuals. This may be all very well for consoling an ignorant man in the continuation of his ignorance; but it is inconsistent with the very nature of mind, and subversive of the foundations of mental philosophy. Of *itself*, the mind, in the case of every individual, can learn any thing, though the body may not assist it equally well in all cases; but if there is failing or fault any

where, it is in the material instrument, and not in the mental agent.

What may be the state of the mind, or the means and extent of its knowledge, when it is separated from the body, we cannot know, as we have no information which does not refer to the two in their connection. But while this connection lasts, the mind can gain *original* knowledge of the external creation only through the medium of the body. It is true the mind can, and does, convert this into the means of obtaining additional knowledge, to which that originally procured through the medium of the body bears but a very small proportion. This, however, can be noticed to more advantage when we come to speak of sensation.

SECTION IV.

GENERAL PHENOMENA OF MIND.

As the different states of the mind are accompanied by different expressions of the body, and get different names, there is some danger of considering them as different powers or faculties of the mind, or even as different minds. We, for instance, say of a fickle man, "He is not of the same mind for two minutes;" and in the case of certain derangements of the system of the body, whether arising from internal or from external causes, we say the man "is not himself." These and all such are, however, evidently figurative expressions, by which we merely allude to the state in which the party appears to be for the time: and in many of them it is evident that we allude only to the condition of the body, and not to the mind at all. When the allusion is to the mind, it must always be to the state of the mind; for we have no present knowledge of the mind, but the state in which it is, and no historical knowledge farther than a journal of its successive states, which is very imperfect to an observer, and even to the party himself.

The differences of those states, and the names which have been given to them, have rendered the study of the mind equally difficult and unsatisfactory. One of the most common of the artificial systems, is that which divides the states of the mind into the two departments of *Intellect*

and *Will*, and peoples them with the two colonies of the *Intellectual powers*, and the *Active powers*. Now this is not only a merely fanciful mode of classifying phenomena which have all the same immediate agent, but it lays the foundation of very serious and almost unavoidable errors.

The states of the mind show themselves in very different ways; and if there is a power of the mind which takes the lead of all the other powers in each of those states, then the mind is a compound in its very essence. But if it is a compound, the separation of the parts of which it is compounded, however difficult it may be, is not an impossibility, even by the operation of natural causes; for we know of no compound in nature, the component parts of which cannot be separated. But a mind which could be decomposed would of necessity be a mortal mind, ceasing to exist when the parts of it were separated, while feeling, revelation, and the fondest hope of every rational being, conspire in making us sure that the mind is immortal and cannot die—can suffer no destruction but that final annihilation, from the very thought of which we turn with horror, and which can be in the hands of the Almighty alone. None but He who could command beings out of nothing can command them back to the same.

The general phenomena of the mind must obviously be those which are equally common to it in all its states, by what names soever those states may be called. Of these there are only two, and probably these two are different modifications of the same one, only we give them different names.

We may here notice, once for all, that those states of the mind to which we give different names, and add, that they are powers, affections, desires, or any thing else, are

not co-existent, and depending upon separate parts or organizations, as sight, hearing, speaking, walking, and the other functions of the body are. The mind, being one and indivisible in itself, cannot by possibility be in two states at the same instant of time, and every state in which it is felt to be, or shows itself to be, must necessarily be a state of the *whole* mind. Therefore there can be no co-existent states or affections of the mind; and we can acquire no knowledge of it by an attempted co-existent analysis, as we can do of matter by a real one. All its different states occur in succession, though they often succeed each other with such extreme rapidity that, to our observation, which is made through the medium of the body, and being clogged by the body cannot keep pace with the instantaneous motions of mind, we can mark no distinction of time between them. But still, the inability of the body to keep pace in observation with the progress of the mind in state or thought, cannot alter the nature of the mind; though language, being the embodyment of observation, has been accommodated to the slow progress of the body rather than to the rapid movements of the mind.

The two affections which are common to the mind in all its states, are those which have received the names of *Consciousness*, and *Identity;* and, as many erroneous statements have been published respecting them, and more especially respecting Consciousness, it is necessary that the real import of the words should be well understood.

Conscious, literally means "thinking *with knowledge;*" though it is also extended to action, and in that case means "acting with knowledge;" and those who have considered the mind as a compound of opposite and conflicting passions and affections, have erected Conscience into a distinct power, and committed to it the arduous task

of keeping all the rest in order. This is of course a mistake: and conscience, notwithstanding all the importance that has been attached to it, both in language and in law, is really nothing more than the simple fact of thinking or acting "with knowledge" of the consequences. In all cases, the thought, the mental state which precedes the outward action, is the important part, the one which stamps the action with the character of vice or virtue; and therefore we may confine our notice to it, without farther allusion to the mere outward act of the body, which body is a mere tool, of which neither vice nor virtue can be predicated.

It is not so much to the thought, or the mental state, whatever it may be, as to the fact of its being "with knowledge," that the term Consciousness is applied; for the thought may be one which leads to good consequences, or to bad, or one of those random thoughts which never produce any perceptible consequences at all; and yet in any of these cases we may be equally conscious of it.

Consciousness is a state of mind different from the thought of which we are said to be conscious, or to true knowledge, and in the order of succession it follows after it, though often so rapidly that, for the reasons already mentioned, they appear to us to come together. That it is a separate state of the mind is proved by the fact that it sometimes accompanies our thinking and our acting, and sometimes not; and the times at which we "lose our consciousness," as it is called, are generally those in which a train of thought is passing so rapidly through the mind, that the one part of it instantly succeeds the other, so as that no allusion to ourselves or to the external world can come between.

Profound thinkers, who engage in long trains of reasoning, which have but little reference to the objects immedi-

ately about them, or to themselves personally, are among the most subject to those mental absences which, on their part, are called abstraction, as during them the mind is, by its train of thought, drawn away from the consciousness either of themselves or of the objects about them.

But though this be often true in the case of those who are profound thinkers, yet all those who forget themselves and what they are about, must not get credit for philosophical abstraction and depth of thought. The Satirist says

"Fools are known by looking wise;"

and he is not far wrong; for the glazing eye of the vacant-minded, which is open but does not see, is not very easily distinguished, at least by common observation, from the eye of philosophic abstraction. The eye is useless to the fool, and it would injure the philosopher's train of thought; and so, as a sentient organ, it is for the time withdrawn from both.

The knowledge which instantly follows the thought, and to which the name of consciousness is given, admits of several modifications, according to the subjects of it. The simplest form of it is to "know that we are thinking," or in the case of action, to know that we are acting; but without any allusion to the nature or the consequences of the thought or the deed. This is simple consciousness; and when the consequences are considered, which often require a considerable train of thought, while the simple consciousness is merely momentary, it becomes a deliberation of conscience, which influences the whole of the train of thought, and ripens it into a resolution to act or to abstain from acting, according as the result of the deliberation may be.

IDENTITY is formed from a word which means "likeness;"

but, as applied to the mind, it has a more precise signification,—namely, that the subject to which it is applied remains the same, and totally unchanged in its nature or essence, whatever it may be in any of those respects which do not affect its identity. The mind is the only subject coming within the scope of our philosophy, in its own phenomena, which can have this identity in perfection, because it is the only one which is perfectly simple, and which therefore cannot, in its own nature, undergo any change.

There is a certain identity in every thing that has a separate existence, which endures as long as that existence lasts: in the human body, for instance, an animal, a tree, a house, or any thing else; but this is a very imperfect identity, as compared with that of the mind. The form of the body changes, and so also does the substance; for not a particle of matter can twice, in succession, pass through the action of the same life. Some calculations have been made with regard to the length of time at which every particle of the human body is changed; but the data for such calculations are very vague, and the rates of change differ so much that they cannot be brought to any satisfactory general estimate; and it is enough for us to know that there are changes, and that those changes extend to the functions of the bodily organs, as well as to the form and substance of the body itself. But in the case of the mind there is, and in the nature of things there can be, no change which can, in the slightest degree, affect its identity; and it is the feeling of this, continued through the succession of time, to which we give the name of Mental Identity, which, after all, is nothing more than a summing up of all the feelings of our consciousness. Of this being the case we have a direct proof in those who are subject to mental absence, either from deep thought or from vacancy. Both

sometimes do very ridiculous things when the mood is upon them; and when they are reminded of those afterwards, they are very apt to deny them, and spurn the identity.

But though the mind is, in itself, incapable of change, the state of it not only changes, but changes with more rapidity than anything material can change; yet those changes of state are not original acts of the mind—they are *affections* produced by causes which may be either *immediate* from direct information through the medium of the body, or they may be *reflective*, or produced by the knowledge of which the mind is already in possession, either with or without reference to any information which the senses may communicate at the time.

These affections make the mind all that it is to us as a subject of study, and therefore the essence of Mental Philosophy consists of a right understanding of them. They are conveniently divided, as we now stated, into external and internal affections; and as the external ones are communicated through the medium of the body, the senses of the body, and the ways in which these are acted upon by external objects, so as to communicate the affections to the mind, this branch of the subject necessarily involves some consideration of those senses, and their modes of action.

SECTION V.

THE EXTERNAL AFFECTIONS.

Before proceeding to the main subject of this section, it may perhaps be as well to remark, by way of caution to such as have devoted little or no attention to this most important department—not of abstract philosophy, but of practical education — that the momentary thought, produced by an internal cause, to which we give the name of an external affection, is in itself a most fleeting and evanescent matter, possessing no quality by means of which it can permanently take hold on the mind, and become knowledge, or the means of acquiring knowledge. Before it can do this, something farther is necessary; for there must be a solution of some kind or other established between it and some other thought; and the discovery of this relation, whatever it may be, is the result of what we call an internal affection—an act of the mind itself upon those impressions which it receives; and thus, if there were nothing but external affections, there could not be anything worthy the name of knowledge—that is, knowledge capable of increase, and of communication from one individual to another.

The nature of this is necessary for the purpose of meeting what weak, but often well-meaning, persons have advanced respecting the possession of reason by the more

sagacious of the animals. These animals have senses, and they act from the impulses of those senses; but they are without the internal affections which are the peculiar characteristics of mind, and therefore they never accumulate knowledge, or treasure it up in any way, and the present generation is never better informed than the last. They are furnished with instincts suited to their wants, in the supplying of which wants a great deal of force, of stratagem, or of both, is often required. Thus, as every creature in nature is adapted in the very best manner to the place which it occupies, and those animals have no reason or mental resource to guide them, their organization is better fitted for its particular purpose than that of man is for any single kind of mere bodily exertion; and their instincts, though very limited in comparison, are not so liable to error as human reason. They are a step nearer to simple matter than the human body is: a stone yields the most perfect obedience to the law of gravitation; and the animals are but seldom wrong in the exercise of their instincts.

The EXTERNAL AFFECTIONS are all received through the medium of the body. The mind, in itself, knows nothing of external nature, unless the body communicates with it; and, though the nature of the connexion between the body and mind is a mystery which we cannot explain, any more than we can explain the connexion between the life of a plant or an animal and its functions, yet that does not bring the fact into doubt, either in the one case or in the other.

All the external affections have their origin in *sensation*, modified in some way or other; and thus the meaning of sensation is the first part of our inquiry.

SENSATION is the susceptibility of being acted upon, or

of receiving impressions; but it is a peculiar modification of it. A hammer makes an impression upon iron, and the digestive organs of an animal make an impression on its food; but the food or the iron has no sensation in consequence. In order that there may be a sensation, the impression must produce in that which is impressed, some result different from the effect which the same impression would produce mechanically or chemically, as matter acts upon matter. In addition to matter, there must be life, before there can be any sensation; and whatever sensation there may be in any vegetable, and in some animals, is very obscure; but those obscure portions of the subject are not required for our purpose, as we are concerned with sensation as it exists in and is exercised by the human body only.

Still, sensation appears to be one of the leading characteristics of animals; and in proportion as the habits of an animal require activity and stratagem, the sensations of that animal are more acute. We may infer from this that there are, in all probability, great differences among the members of the human race in respect of sensation; for dull senses cannot be supposed to affect the mind so vividly as active ones. Thus, there is meaning in the epithets of "sensible" and "senseless," as applied to mankind, though the common application is erroneous, as being made to the mind itself, and not to the impressions communicated to it by the body.

Seeing, hearing, smelling, tasting, and touch or feeling, are the five senses which the human body is usually said to possess in common with all the more highly-organized of the irrational animals; but there is a more general sense in the living body, of which the ones now enumerated appear to be only modifications suited for particular purposes by

means of particular organs. This sense has been called *muscular feeling*, or the sense of muscular resistance; but as there is a question as to whether the real seat of the sense be in the muscular fibres, in the nerves by which these are accompanied, in the two taken jointly, or in all the fibres and membranes of the body, it is perhaps better to avoid the term muscular, and call this simply the general sense, or the animal feeling.

THE GENERAL SENSE.

The late Dr. Thomas Brown, of Edinburgh, was the first who furnished us with clear and satisfactory notions of this most important portion of human physiology; and in this, his intimate acquaintance with the structure and functions of the body, gave him great advantages over ordinary metaphysicians, as did his extraordinary power and tact in analysis in other branches of the science. We shall not, however, quote his words, or even follow the line of his arguments; for his lectures are published just as they were delivered to his class, and his philosophy is too profound; and clear as his views are in themselves, they are rendered so dark by the "excessive brightness" of his language, that they are not very well adapted for a popular work.

It is probable that the general or muscular sense comes into operation long before any of the others; that the mind receives the first rudiments of its education, by means of this sense, before it comes into the world; that this species of education continues, and affords information, until the organic senses are developed, and capable of acting; that it then becomes their instructor; that it continues their co-operator and assistant through life; and that, as it is the first to be awakened in infancy, it is the last which remains before death.

It is also possible, indeed probable, that the particular senses are all connected with this muscular feeling; and that they, in part at least, act in consequence of it. But this is an obscure portion of the subject, and one upon which there is some ground for dispute; and, as that is quite inconsistent both with our object and our space, we shall touch very lightly upon this portion of the science.

Many of those disputes and mistakes have arisen from the assumption—and it is a bare assumption, of which no proof can be given—that the brain is the grand organ of sensation, to which one set of nerves convey their intelligence, and from which another set convey the mandates of this ruling organ, and make them to be obeyed by the limbs and all the distant members of the body. Thus, for instance, when the surface of the body is suddenly exposed to the cold and raw atmosphere, one set of the nerves under the skin report to the brain how very cold and comfortless it is, upon which the brain sends word by the other set of nerves, that, in consequence of the cold, the body must shiver. This is the simple statement in the case of all sensation and action of any kind consequent upon that sensation; and certainly, when stripped of the frame-work of technicality and the pomp of style, it sounds not a little ridiculous.

We know that the brain is a highly important organ, and that violent injuries done to it are attended with fatal consequences; but we also know that there have been instances in which sensation, and the affection of the mind by sensation, have not only remained unimpaired, but have actually become more acute, when parts — almost every part — of the brain have been converted into an inorganic mass by topical disease; and there have been cases in which nearly the whole brain has been injured in this way,

where yet the sensation remained acute, and the body readily imparted its intelligence to the mind.

The attempts to allocate the head-quarters of sensation to any part of the body, appear, therefore, to be as futile as those which, in an earlier age, were made to allocate the mind in the same manner: and when this last was the fashion, perhaps he who placed the soul in the stomach, so that it could enjoy the good things of this life, showed as much rational knowledge of the subject as he who gave it its local habitation in the pineal gland of the brain. But this is an *ignis fatuus* kind of subject, and so we shall pursue it no farther.

It is highly probable that very many of those sensations or affections which are usually ascribed to the sense of touch or feeling, really belong to the general sense now under consideration.

The sensations of heat and cold, and all those peculiar and often indescribable influences of the varied pressure, moisture, and temperature of the atmosphere, probably address themselves to this sense. The palms of the hands and tips of the fingers are usually regarded as the parts in which the sense of touch specially resides; but to many impressions from without, and more especially to those of heat and cold, they are much less sensitive than many other parts of the body. Even the nicer operations of the hand in working seem to depend far more on the muscles than on the sensitiveness of the skin on the palm and fingers; for those who are most capable of performing those nice operations in the best manner, generally have what we are accustomed to call clumsy hands and arms—large and firm muscles throughout the whole member, thick and dumpy fingers, and a large ball to the thumb.

In the case of every sense, whether more general or more

particular, the object by which the sensation is produced must be in contact with the organ of sense, and act upon it as matter acts upon matter, either in itself directly, or through some medium. The object of sense must make a physical impression upon the organ, otherwise there can be no sensation. Smell, and hearing, and sight, are no exceptions to this, though, upon superficial consideration, they may seem to be so. The scent of the rose, or of any odoriferous substance, is felt when that substance is at a distance from the organ of smell, greater or less according to the pungency of the odour; but in every case there are odoriferous particles given out by the scented body which find their way to the organ of smell, though they are so minute that no other sense can take cognizance of them; and, in all probability, many millions of them would not amount to an estimable fraction of a grain.

In the case of hearing it is the same; for whatever may be the distance of the object from which the sound proceeds, there must be some medium, or succession of media, all the way from that object to the ear, by means of which those pulsations which are the immediate causes of the sensation of hearing may be communicated. Nor is it different in the case of sight, which has the largest range of any of the senses. It is true that we see stars which are at a greater distance from us than we can by any means estimate; but though we, in common language, say that we see these same stars, the fact is that we do not see them: we only see the light which comes from them to the eye. Not only this, but the size, the colour, and even the place of the visible object, as we call it, are all changed, and greatly changed, by the nature of the medium through which the light comes, and also by the new directions into which it is changed by refraction or reflection. The sun, the

moon, and all visible bodies whatever, are magnified in size when they are seen through a simple fog. According to the state of the atmosphere, as being clear, gummy, or clouded, the luminaries appear of different colours; and by the interposition of a piece of coloured glass between the eyes and the sun or other luminary, we may make that luminary of what colour we please, through all the tints into which the white light of the sun can be decomposed by the prism, and through all their varieties. In consequence of the refraction of the atmosphere, even in its ordinary states, every celestial body, especially when near the horizon, appears higher than it is in reality; and actually makes its appearance above the horizon some time before it is actually there in absolute position.

The fact is, that the number of these optical deceptions is beyond all calculation; so that what appears visible to us can never be with certainty pronounced to be either like that which it appears to be, or in the same situation. In the case of repeated reflections from the posterior surfaces of angular prisms of glass, the light, if kept in the same plane — for if it is thrown into a plane at right angles, it ceases to be visible in certain positions—may be so managed as that the object from which it comes may be made to appear in every possible position in the circumference of an entire circle.

The *camera lucida*, contrived by the late Dr. Hyde Wollaston, is a good illustration of this. It consists of a small glass prism, having the upper surface and the front face at right angles to each other; and the other two faces placed at such angles as that the light which falls upon them is wholly reflected. The reflections from these throw the light which falls on the front face of the prism—and consequently the representation of any object which may

be placed before that and properly illuminated — into a right angle to its original position; and thus the object or objects before the prism are thrown, by this reflection, upon a sheet of paper, or any other surface under it. An eye-piece is also so contrived as that the eye can see partly through the angle of the prism, and partly past it; and the consequence of this is, that both the representation of the object, and the paper with the hand and a pencil can be seen, and the object can be traced in the most correct manner. Many other instances of the change of the apparent places of objects, by merely altering the direction of the light which comes from them, might be given; but that which has been stated is sufficient to show that we do not see the distant body, but merely the light which comes from it, affected by all the changes which that light may undergo on its passage.

In like manner, all the allocated senses, or those which have specific organs, are deceptive: they never inform us of what really is, but merely of the impression which is made upon them, which impression may be either true or false, and of this the mere sense can give no information. The fact is, that the organ of sense is wholly passive in the impression which it receives, and cannot make any election one way or another. Whatever impression it receives, that impression it communicates to the mind, without any indication as to whether it is true or false.

Every impression made upon the senses of the body, whether it be upon any of those senses which have specific organs, or upon that general sense which belongs to the structure of the living body, is part of the philosophy of matter, and not of that of mind; and, in many cases, the application of objects in different states produces the same effect on the sense, and the application of an object in the

same state produces effects which are wholly different, so that the information which we receive through the instrumentality of the senses cannot be absolutely depended upon, unless we can verify it by other means; and the application of these means always involves the consideration of a relation, or the comparison of one result with another, which is a mental operation. Thus, although the mind receives the whole of its knowledge of the external world through the medium of the senses, yet the mind itself must, in every case, examine what the senses communicate, in order to ascertain whether it is or is not correct.

There are two cases which have often been alluded to in illustration of this, but they show it in so striking a manner that we shall notice them in preference to any others, though some might be adduced in which there is much more of novelty. The cases to which we allude are very important, because they show, that if the same impression is made on the organ of sense, or on the body generally, the information thereby communicated to the mind is exactly the same, however different the cause may be.

The first instance is the very similar effects that are produced by the application to the body of substances at very high and at very low temperatures. We are not certain that Milton was aware of the physical fact, when he said of the low temperature of a certain imagined region in the place of final retribution to offenders, that it

> "Burns frore, and cold performs th' effect of fire;"

but that it is so, is literally true. Mercury does not freeze, or become a solid, in even the coldest weather which we have in any part of Britain. The temperature at which it becomes solid is 39 degrees below zero of the common thermometer, or 71 degrees below the freezing point of water;

and we never have such low temperatures unless they are produced by artificial means, chiefly by the mixture of substances which, from the rapidity of their melting by the action of the one upon the other, absorb a great deal of the action of heat, and absorb it very quickly; but in colder countries, such as the extreme north of America, mercury becomes a solid under the ordinary temperature of the winter atmosphere; and if it is touched by the fingers when in this state, the sensation, and also the topical effect which it produces, are exactly similar to those which result from the touching of hot iron. The solid mercury sticks to the fingers, and burns them just in the same way, or at least with the same sensation, as hot iron does.

The actual effect produced upon the fingers is the same in both these cases, only the mode in which it is produced is reversed. In the case of the hot iron there is a rapid communication of heat *to* the fingers, and in that of the frozen mercury there is an equally rapid communication *from* them; and thus the sensation and the physical effect only show that there is an equally rapid passage of heat in both cases, but give no information as to the direction in which this heat passes. This, of itself, is sufficient to show that the information afforded by the senses is nothing more than that of a certain physical effect being produced in the organ, without any reference to the cause which produces that effect, or the manner in which it is produced. Nor are we absolutely certain of the extent of the effect, from the sensation which we have of it; for much depends upon the state of the organ, and also of the body generally, at the time when the impression is made.

Of the states of the body generally, by which the impression made upon any sense is varied, it is scarcely possible to speak with any thing like precision; for they are so

many, and produced by such various causes, that no general rule can be applied to them. The following case, however, which any one can easily try by actual experiment, shows that very much depends on the state of the organ, or other sentient part of the body :—

Take three basins of water, one as hot as the hand can bear, another as cold as can be obtained, and the third at an intermediate temperature: plunge the one hand in the hot water and the other in the cold, and keep them there for some time; then, removing them suddenly, plunge both into the water at the intermediate temperature, and the one from the hot water will feel cold, and that from the cold water will feel hot.

This experiment shows how very little reliance we can have upon mere sensation, further than the effect which is produced upon the organ of sense; and even equal effects upon it do not produce equal sensations, if the state of the body is different. A person in a calm and contemplative mood starts at the slightest prick of a pin, or at the tickling of a feather; but a person in the heat and excitement of a battle may receive very severe wounds, not only without any feeling of pain, but without being in the least aware that any thing is the matter.

There is a lesson of some practical importance involved in this, or arising out of it, if space would permit us to go into the details. It is this :—Indolence, either of the body or the mind, is a source of annoyance and torment to us, while the constant occupation of either insures tranquillity. When we are doing nothing, and pursuing no regular train of thought, we are at the mercy of every viscissitude, for the slightest impression tells upon us; and that which is quite unheeded by those who are actively occupied makes us altogether miserable. The fatigue of listless indolence

is thus far more painful to bear than the fatigue of the most vigorous exertion, and not only this, but it is more injurious to the health, and wears out the system much sooner; so that, by the very constitution of our nature, the life of the lazy man is short as well as useless; and if we do not need to be occupied for the purpose of finding our living, still it is our interest to be so for the sake of our comfort and our health. Vigorous exertion has a twofold influence in increasing the value of life: it makes every day longer in usefulness, and it adds to the number of our days.

SMELLING, TASTING, AND HEARING.

Though these three senses are, in a great measure, different in their organs, and in the sensations of which they convey the impressions, yet there is some similarity in their general nature. If they are unaccompanied by the operation of any other sense, and also of all mental reflections, the information which they give us is exceedingly small. What they immediately impart is a mere feeling, which is pleasurable or painful according to circumstances; but it has, in itself, no relation to the object producing this feeling, nor does it inform us of the existence of an object at all.

Thus, in the case of smelling, the scent which we attribute to any thing gives us no information as to the nature or even the existence of that thing; and a diseased state of the organ may, and often does, give us the sensation of the odour of some substance, even though that substance should not be within a hundred miles of us, or even though it should not exist. There is, for instance, a certain odour which we call the smell of roses; but our sensation of this does not give us the least information as to what kind of rose it is, where it is situated, or whether there is any rose

in the case at all. It may arise from otto of roses, or oil of roses, or it may be a mere sensation—an imagination, or fancy, as we call it—upon our part, without any exciting object whatsoever.

In the case of taste, it is just the same: the sense gives us no information beyond a certain agreeable or disagreeable feeling, which we call "a taste;" but of the nature or even the existence of the sapid body producing that taste, it tells us nothing. Like smelling, too, it depends very much on the state of the organ, and not a little on that of the general health. In many diseases we feel disagreeable tastes, when there is no body whatever, sapid or otherwise, applied to the palate; and we often loathe in one state of the body the taste of that which pleases us the most in another, even when we can name no specific difference between these states. It is probable that the senses of smelling and tasting are more nearly allied to each other than they are to any of the other senses; for, if we hold the nostrils closed while we take a liquid into the mouth, we are unable to decide whether that liquid is wine or water.

Thus, neither of these two senses is, in itself, capable of giving us the slightest information, farther than the mere momentary feeling, and the fact of this feeling being either agreeable or disagreeable; and had we to depend solely upon them, we should never arrive at any knowledge farther than the mere fact that we exist and feel; and in the absence of any immediate feeling, even existence itself would be a blank, and we should live only in the immediate feeling, without memory of the past or hope of the future.

How far this may be the condition of the other animals we cannot tell; for as we ourselves can know nothing and do nothing in which a mental process of some kind or other is not concerned, it is difficult for us to think of their actions

without reference to a process of the same kind. This, however, is our liability to error, and not any part of the philosophy or true knowledge of the case. We depend on our mental resources for our instruction and guidance in all matters; and, as the animals are without these resources, they must have some substitutes, by means of which they may preserve their existence, and perform their functions in nature.

But, even in those cases in which we are apt to impute memory or foresight to them, we err by making ourselves the standard. An animal shuns that which hurts, and goes to that which is agreeable; but a plant does the same; for, if placed in a dark apartment, where there is only one glimmering light, it will make wonderful efforts of growth in order to reach that light. Instances are mentioned of the common potato extending its growth for more than forty feet, in order to reach the single aperture in an old tower in which the tuber had been left; whereas, had the same tuber been planted in the open ground, with free exposure to the air and light, the stem would have grown without any inclination to one side or another, and probably not reached the height of more than a foot or eighteen inches, with all the stimulating effects of soil, manure, and culture.

Nobody will venture to say that the potato in this case *knew* that the light was good for it and the darkness bad, or that it had any knowledge whatever of the existence of the one or the other, or of its own existence; and, numerous as are the operations which animals perform, the probability is that not one animal of the whole *knows* that it exists. It must be borne in mind that consciousness, whether of the present feeling or of that succession which constitutes identity, is, even in man, an operation wholly of the mind,

often following the affection of the external sense as suggested by it, but never in any instance produced by that sense, or originating in it.

Provision for the future, as made with an expectation of what may happen in that future, can originate only in memory of the past; and that the animals make this provision as often and as carefully when they can have no experience, even if we granted them all the reason that could be imagined, is conclusive against the possibility of their proceeding upon what we call experience. There are few parts of the economy of animals in which the provision for the future is made with so much labour and so much nicety as in the depositing of their eggs and the providing for their young by female insects; but it would be quite absurd to say that they have any *design* in this, or any knowledge either of what they are doing, or of the simple fact that they are in existence at all. Experience in the operation which they perform they can have none, for they perform it only once; and that a common white butterfly should remember that it was once a caterpillar, and in that state ate the leaves of cabbages, is too much even for the most credulous of human beings to believe. In the animals, we find nothing but what can be produced by sensation; and in sensation we seek in vain for any thing which, of itself, is or could become knowledge.

In its results — that is, in consequence of the mental operations which are founded upon the affections which it communicates — the sense of hearing is far more important than either the sense of smelling or that of tasting; but in its own single and momentary exercise it is very similar to them. The ear communicates no information as to the cause of the sound which affects it; and though we are in the habit of using the words, "a sonorous body,"

"a sounding body," very vaguely, and without exactly knowing what we mean, as we do in very many other cases, there is, in truth, no such thing as a sounding body in existence — at least there is none as directly affecting the ear in hearing. In hearing there is only the effect of a certain kind of vibration of the air upon the ear; and the knowledge of how and by what this vibration is produced must be ascertained in some other way.

But notwithstanding this, there are associations connected with the sense of hearing which lead us to consider it as a sense of a higher order than either smelling or taste. Indeed, notwithstanding all the beauty of which we obtain the simple perception by means of the eye, hearing is perhaps the most valuable to us of all the senses; and observation shows that it is the one, the loss or want of which is most severely felt. The blind are often cheerful, notwithstanding the darkness of the world to them; but there is always an air of melancholy about the deaf.

In this there is something worthy of notice, for it shows how much we are constituted by nature for the receiving of knowledge in that peculiar way in which, of all the creatures upon earth, we alone can receive it. The information which we derive from our personal observation and experience is but little, even with those who live the longest and observe the most; and, in early life, it is quite inadequate to our guidance. Thus the fondness which we have for conversation—for hearing the voices of our fellow creatures —becomes one of the most valuable propensities of our nature. It is also one of the surest foundations of human society. All social animals have some sort of voice by means of which they call and answer to each other; and thus voice, and consequently hearing, without which voice

would be of no value, are bonds of society even among those lower animals. It is not, however, for the purpose of communicating knowledge to each other that these animals associate; and indeed, the causes why they do gather into flocks, and why some species do this, while others do not, are points involved in considerable obscurity, so that any general reason that may be assigned is more likely to be wrong than right.

Among mankind the principles are better understood, and the practical advantages have been more observed; and the result is, that the more closely mankind are united into a society, and the more frequent their intercourse with each other, their vocabulary becomes the more copious. There is, however, a very marked difference between the voices of men and those of even the most social of the other animals —a difference marked enough to show that they have had very different origins. Variety of climate has some effect upon the tones of the voices of those animals—as, for instance, a goat or a sheep tempered to the cold and keen air of a mountainous country, bleats in harder tones than one which is a native of the valleys; and something of the same kind is observable with regard to the mere intonation of the human inhabitants of mountains and valleys. But there are differences in human language for which no varieties of country or climate will account; and these do not apply to the mere tones so much as to the essential structure of the language. In every country in which they are found, the sheep bleats and the ox lows; and though there may be slight variations in the volume or character of their voices, in the same manner as there are varieties in their forms and sizes, and very likely produced by the very same causes, the voice of either the one or the other never

can be mistaken in any country by those who have been familiar with it in another country, whatever may be the difference of the physical circumstances of the two.

The voice of an animal is therefore, in every case, a natural endowment, — given to it in the same way as its organization, its size, and its habits, and not in any way requiring labour or example in the attainment; for if a lamb is taken the instant it is dropped, and kept apart from the whole of its own species, but associating freely with other domestic animals, it will bleat when it grows up in exactly the same way as if it had never been separated from the flock, nor will it by any means acquire the smallest portion of the voice of any of those other animals with which it associates in its captivity.

A child born of parents of any one country, and carried to another country where the people have a different language—and no matter how different it may be—invariably acquires the language of that people, and even that class of the people, among whom it learns the use of speech. There are, as we have said, some local differences, which belong to the tone and articulation, without any very obvious relation to the more essential parts of the structure of the language; and these are probably, to some extent, geographical, or dependent on the physical character of the place.

This is proved by the fact—open to everybody's observation—that children acquire the peculiarities of pronunciation which characterise the district in which they are born and brought up, even though their parents and others about them should have none of these peculiarities; and it requires a good deal of teaching to prevent them from retaining these as permanent habits, though, in the general character of their speech, they resemble those about them.

This furnishes conclusive evidence that, while the mere sounds of the voice are in great part dependent upon physical circumstances, the sense in which the words and phrases are used, and the characters of these words themselves, are mental matters, acquired and acquirable only by education.

It is quite common to hear people speak of the meaning of words, and to remark that certain expressions have much more meaning in them than others; but this is very incorrect, for in words themselves there is no more meaning than there is in any other noises. To one who understands no language save English, what meaning is there in French or German? None whatever; and if the habit of the people be to use much gesture, then a person of more sober speech is apt to imagine that the subject is of vital import, when all the time it relates only to the most common-place trifles.

Therefore, though the ear is certainly of far more value to us, in the application which can be made of it, than the organs of smell and taste, there is no difference in kind between the mere sensation in the one case and in the other. The ear hears nothing but sounds or noises, which are pleasurable or painful according to circumstances, but it, of itself, gives no information what they are or whence they come; and if there were no mental process—no relative allusion to experience, in addition to the simple effect of a noise upon the ear—then we could not, by possibility, know either whence the noise came, or what were the meaning of it. It would feel only as an unknown something affecting the body, though in what part we could not know.

To have clear notions of the natural and necessary distinctions between the affections of the senses, considered

as part of the body, and the subsequent mental operations which follow them, is one of the most important points in mental philosophy; for it involves the question of the existence of mind as something different from and independent of matter. If we do not make the necessary analysis, so as to see clearly the distinction between the two, and that no one of them can, in the slightest degree, perform any of the functions of the other, then the existence of mind, as being the less palpable of the two, instantly becomes a matter of doubt; and, though this doubt is an erroneous one, still, according to the understanding that we have, and beyond this we of course cannot go, it is, to us, reasonable and well founded.

If the ear, or any other organ of sense, could, of itself, furnish us with the slightest information—if it could even let us know that we have an ear—then the possession of mind would be superfluous; but the sensation produces a mere momentary feeling, of the cause, the nature, or the situation of which, it can tell us nothing.

Even with the possession of mind, there are many feelings which we either cannot allocate, or which we allocate in the wrong places. We often, for instance, feel twinges of pain, without being able to decide in what part of the body they are felt; and they who have had limbs amputated, not unfrequently feel twinges of pain in the limb which has been cut off for years; and they feel with so much acuteness that they will clap their hand to the place, just as is done in the case of pain in an unsevered member. Those also who have had a tooth drawn, after it has long tormented them with toothache, feel occasional twinges of toothache in the place, though not an atom of the diseased tooth remains in the gum.

Of the last of these, instances may be found almost any-

where; and of the first, abundance may be met with in Chelsea College, Greenwich Hospital, or any other asylum for mutilated soldiers or sailors. There is an old man in the former who has lost both legs, and he states that he feels pain in them with changes of the weather, but more especially on the anniversary of the mutilation. This shows that the feeling is a mental one—one of memory, as we call it.

In diseased states of the ear, even when, to our examination, there is no topical injury, we often hear continued noises, which will not suffer us to think or rest; and though they are produced by nothing external, we have a constant feeling that they are so. In the case of every sense it is, more or less, the same; and if the senses thus give us feelings of the presence of objects which have no existence, it is pretty evident that they cannot be, in themselves, sources of information, as to whether any one object exists or not.

These imaginary sensations are, generally speaking, of a painful nature, and this proves that they are connected with some disordered state of the body, the place of which cannot be assigned; and thus, as the mind cannot refer it to a subject of present knowledge, the reference is made to a former experience, much in the same way that the present impression of one object brings to our mental recollection the former experience, either of that one or of another.

SEEING.

The pleasures which we obtain by means of the sense of sight are so many and so delightful, that we are very apt to ascribe to the physical or bodily part of it much more merit than it, in truth, deserves. The beauty of the organ, the comparatively accurate knowledge that we have of the

medium, and the ease with which a certain part of the process can be explained upon the ordinary principles of physical philosophy, and illustrated—at least so we suppose—by apparatus, all tend to increase this disposition to error.

The eye, it is said, is an optical instrument, with lines resembling those in a camera-obscura; and these lines throw the images of things before the eye upon the retina, a sentient tissue in the inner part of the organ, in the same manner as the lenses in a camera-obscura throw upon the table of that instrument, the images of those objects which are within its field of view.

Thus far all is well; and, even viewing it only thus far, the subject is beautiful and interesting. But the beauty and the interest consist more in the light, which is the medium, than in the camera-obscura as an instrument, or the eye in its merely organic structure. Light is, in fact, a wonderful phenomenon. We cannot call it a substance, for substance it has none,—all the sunbeams that ever fell on the earth would not weigh the ten thousandth part of the smallest atom of matter. We know it only as a very peculiar and very rapid kind of motion; and as all motions have reference to space, we can divide light by the line; but we cannot divide it by the balance; and its course is so rapid, that we cannot make a perceptible division of it across the direction of that course. Some notion of its rapidity may be obtained from the fact, that two hundred thousand miles of sunbeam fall upon an object, and are reflected from that object to the eye, in the time that we are looking at it for one second.

Thus it is a very swift messenger, and can tell a long story in a short time; and, from its great power in this respect, we can judge of its power in others. The tenth

of a second is about the shortest time that even a practised observer can discriminate; and yet in that brief space, light can inform us of twenty thousand matters, all at a mile's distance from each other. As the medium of sight, it comes to the eye, giving a faithful representation of the visual appearance,—that is, the colour, of that from which it comes, or through which it passes.

But, as the medium of sight, it gives no impression save that of colour, though observation and experience show us that the shade and intensity of the colour which we attribute to any object may vary greatly, in consequence both of the character and the duration of that particular light in which it happens to be seen.

Light does not, of course, bring along with it the object from which it comes: it merely arrives thence as an action, or motion, and as such produces its impression. What is this impression, regarded simply as a sensation, without any reference to the mind? If I look through the window at a rose in the garden, or at a star in the sky, is it the rose or the star which makes the impression on my eye? It cannot be; for the rose remains on its stem, and the star is so remote, that no astronomer can measure, or even judge of the extent of its distance. Therefore, there is nothing in either case by which the eye can be affected, but the light: and it must be the same in every case, be that case what it may. Consequently, the result upon the eye can be nothing but a mere feeling, agreeable or otherwise, but not giving any information as to the nature, or even the existence of the eye, the object, or any thing else. If there was no mental process, no relation of experience, to which this effect on the eye is referred, with that rapidity which the mind has in passing from one state to another, then the sensation of sight, like all the other sensations,

would produce nothing but a vague feeling of the nature, place, or existence, of the cause of which no information would be afforded. The first impressions which the boy couched by the celebrated Cheselden had of visible objects, were exactly those of muscular feeling—the objects seemed to "*touch* his eyes." Thus, there is nothing in vision which can enable it in any way to supersede the use of mind, any more than there is in the most vague and even imaginary feeling of pain or pleasure, to which we can give no name, and assign no cause or locality.

And, in the case of the eye, the feeling may be as totally without foundation, as in the case of any other sense, and may result wholly from disease in the organ, or even from some derangement in the general condition of the body, which does not show itself by any other means. A violent blow upon the eye, or even near it, produces the impression that a flash of light is seen—that "fire flies out of the eye," as the people of some districts say; and this, by the way, shows that light is intimately connected, if not identical, with motion,—a peculiar modification of motion, resulting from the particular qualities of some kinds of objects, or rather, perhaps, of actions; and that the excitement of the sensation which it produces on the eye, may have either an external cause, or an internal one. We may further remark, that in certain states of exhaustion and inflammation of the eyes, produced by long and severe watching, or other means, neither the darkness of night, nor the firmest closing of the eyelids, will shut out the light. There is a luminous net-work in each eye, which becomes the brighter the more one strains to shut it out; and surely no one will argue that there is any external light in this case. It is merely the ardent struggle of the

turgid vessels, which bring up the action to that degree of intensity of which light is one of the concomitants.

The glaring of the eyes of animals when they are under certain excitements, and also the varying lights in the human eye, appear, like those just alluded to, to be the result of strong emotion, which extends to that organ, and influences its appearance; and, by the character and changes of this appearance, often tells what is going on within, when the party would be very willing to conceal it.

But there are also many instances, and these occurring in the waking hours, of the impressions of objects, as actually visible, not only in cases where there is no reality, but in those where the alternating states of mind which come in between, convince us that there is none. This happens in the case of spectral appearances,—arising, no doubt, from some derangement in the state of the body, though often from one of which no other symptom can be traced. There are many instances of these upon record; and though they are known by the party to be as "unreal," and as much a "mockery," as the ghost of Banquo was by Macbeth, yet they will not "Avaunt, and quit the sight," let the parties conjure them with what earnestness they may. They are far more stubborn than if they were realities; for we could either expel these by physical force, or quit them; but while the feeling lasts, there is no escape from the phantom.

In the whole of Macbeth's addresses to the ghost of Banquo, there is a vein of the most profound philosophy of that curious part of human nature which relates to the spectres which haunt the guilty mind; and yet it is possible that "the mightiest of the sons of men," to whom we owe that wonderful delineation, knew and cared little for the mental philosophy of the schools.

"Avaunt! and quit my sight! Let the earth hide thee!
Thy bones are marrowless, thy blood is cold;
Thou hast no speculation in those eyes
Which thou dost glare with!"

Hence the anguish, that he could not expel the spectre, and the earnest desire that the deed were undone, and that he and his victim might meet in honourable combat—

"Be alive again,
And dare me to the desert with thy sword;
If trembling I inhibit thee, protest me
The baby of a girl.—Hence, horrible shadow!
Unreal! mockery!—Hence!

In passing, we may remark, that in the ordinary readings the force of this inimitable passage is not a little destroyed by making the word "unreal" an adjective, to qualify the word "mockery;" and thus making Shakspeare guilty of a bull; as an "*unreal* mockery" would be no mockery at all.

But let us return for a moment to the comparison of the camera-obscura and the eye, because it is highly probable that, when Mechanical Philosophy was lord of the ascendent, that had no small influence in reducing the body to a machine, which is one step — and an irretraceable one — to materialism in the doctrine of the mind. "The whole structure of the body," say they, "is mechanical,—lines, pulleys, ropes, and all sorts of mechanical powers." Be it so. Did ever any piece of mechanism put itself in motion? or can any mechanical combination increase the work done in an equal time? Not a jot; but the reverse: for the more complicated the tackle, the absolute loss of power in using it is always the greater; and though the most efficient tackle were to lie in a warehouse for a thousand years, it would never move a single ounce of goods. It is the

same in the case of the mere mechanism of the body,—it stirs not, if the power of life is either dormant or extinct.

In like manner, let it be granted that the mechanical part of the eye, and the mechanical effect of light upon it, up to the formation of an image on the retina, of which, however, we can have no proof in the living body, are the same as those in the camera-obscura. What then? Does the camera see the image on its table? or can the least *sensation* be produced in it, by any means whatever? Therefore, this illustration fails us at the very point where it should begin to have any value. We must, consequently, set it aside, as quite useless for the purpose which we have in view, and apt to lead us wrong if we attempt to apply it to that purpose. This brings us back to the simple conclusion at which we arrive, and that almost immediately, in the case of all the senses, namely, that there is, in each of them, a certain effect upon the organ, in which that organ is really passive, and according to the condition in which it may be at the time, must receive the impression which is made upon itself, but that it can receive no more than this, and that the result is a mere momentary feeling, of itself imparting no knowledge, and leading to none.

TOUCHING, AND THE SENSATIONS REFERRED TO IT.

In popular language, that sense to which those who treat of the Philosophy of Man, give the name of *Touch*, is not unfrequently called *Feeling*; but the name is objectionable, as it is used as generally expressive of the immediate results of all our affections, whether external or internal. The name Touch is not much better; for there is no such case as that of absolute touching, between a moveable body and any other body whatsoever. The probability, indeed, is, that there is no absolute touching of particle and

particle, even in the most solid substance of which we have any knowledge; but this is a question, the investigation of which is not essential to our purpose.

The sensations which are usually referred to touch, are those which do not come immediately within what is understood of those senses which have specific organs,—such as heat and cold, roughness and smoothness, and all those that may be produced by external objects on the body generally, or within the body itself. The phenomena of this supposed sense are so many, that it does not admit of any definition which can be both clear and general; and, perhaps, the best view that can be taken of it is that which represents the general sense, as already briefly mentioned.

It has also been said, that by this sense of touch, we can make ourselves acquainted with the shapes and magnitudes of bodies; but this is not merely doubtful, it is untrue. After we have, by experience, acquired a mental standard in either of these, or any other matter, we may make the sensations which we receive in this way the means of reference to that standard, just as we, after similar preparations, are enabled to refer to the other senses; but the knowledge, whatever it may be, is the result of a mental process consequent upon the bodily sensation, but not the effect of it.

The fallacy of believing that the sense alone can give us the knowledge, may be proved by many experiments which any one can repeat. One of the most simple is as follows:—Take any little spherical body,—a schoolboy's marble, for instance,—lay it on the table, and roll it round and round under the pressure of the palm of the hand, of one finger, or of two fingers placed side by side in their ordinary position; and however long the operation is continued, the marble will feel only as one. But bring the

middle finger over the forefinger, so that the tips of the two may be in lateral contact, and then roll the marble under the two, taking care that the tips of both are in contact with it; and after you roll it for a little time, the marble will feel as if it were two perfectly distinct ones under your fingers, even in spite of the known fact that there is only one; and if you continue to roll away, this feeling will so far get the better of your knowledge of the fact, that you will be disposed to assert, or even to bet, that there are actually two marbles under your finger.

The same experiment may be more simply performed thus:—Take a common poker which has a little knob on the top of the ball at the head, shut your eyes, bring the middle finger across the fore finger, and touch the ball with the tips of both, and you will be quite convinced that there are two pokers.

This simple experiment shows that there really is no more real knowledge communicated by the mere act of touching, than there is by that of any of the other senses. It shows a good deal more than this, and there is something of considerable importance in the additional showing,—namely, that there is not, in the body, any one sensation of a material nature, either in the brain or in any thing else, to which the intelligence furnished by the senses is, or can be, conveyed; for if there were, the simple fact of putting the one finger across the other could not communicate the feeling of two pokers, when there is only one, while they are kept side by side in their usual position. It shows clearly, that the fact, whether there is one object or two, or whether, indeed, there is any object at all, is not arrived at by mere sensation, or by means of a material sensorium of any kind; but that it is a judgment of experience, which we cannot possibly obtain without those

comparisons, and findings of relations, which are the province of the mind alone, and not in any wise that of the body in any of its organs or systems, whether general or local.

It will not be necessary to proceed farther in the examination of our mere sensations. Enough has been stated to warrant the general conclusion, that, if we were wholly dependent upon them, we should be the most ignorant and helpless, and therefore, the most miserable creatures upon the face of the earth:— that we could know nothing, not even the simple fact of our own existence;—that we could do nothing; and that therefore, by necessary consequence, we could not exist.

Thus, when we examine the bodily or material powers of man—and they are all included in the list that we have given, either by name or by very obvious implication,— we are not merely led, but absolutely driven to the conclusion, that the existence of an immaterial and immortal soul in man is not only a matter upon which there can be no rational doubt with those who take even the most superficial view of it; but that the very imagining that man can be without such a principle in his nature, involves a contradiction which no sophistry can overcome, and renders the existence of such a man an absolute impossibility.

SECTION VI.

AFFECTIONS CONSEQUENT TO BODILY SENSATION.

In the preceding section, there has been given a short summary of the bodily sensations, both as regards those senses which have their principal seats in specific organs — as smelling and tasting in the nose, the palate, and the tongue, hearing in the ears, and seeing in the eyes, and as regards that more general sense which has no distinct local organ, but is diffused through the living structures of the body, and to which, therefore, no single name can be given expressive of all the feelings which arise from it. It has been called Touch, in relation to the surface of the body, the muscular sense, irritability, and other names, in relation to the immediate organs of motion; but where the allusion has been more general, and referable to any one portion of the living body, without particular regard to its structure, its situation, or its rise, it has very generally been called Feeling, which, as applied to the body only, is almost synonymous, or has the same meaning as Sensation.

The word Feeling has, however, a more extensive meaning than Sensation, being applied to all our affections, both external and internal; and thus, if we use it as the distinctive name of mere bodily feeling, even in its most extensive form, we are apt to confound the body and the

mind, and thus have confused notions of both. But a clear perception of the distinction between these is the very point from which we must set out, if we wish to obtain such knowledge of the phenomena of mind as shall be both profitable in the acquiring and useful in the application; and, therefore, it is desirable to avoid, in those remarks, which apply specially to only one of the parts of our compound nature, such words and expressions as are, in the language of common life, applied almost indiscriminately to both.

This precaution is necessary in every branch of Mental Philosophy; and it is the want of this which, more than any thing in the nature of the subject itself, has thrown an air of abstruseness, difficulty, and even inutility, over this branch of science,—which has made, and still continues to make, the great majority of mankind—even those of them who lay claim to, and actually possess, learning upon other subjects— turn with aversion from the study of the mind, as a subject upon which little or no knowledge is attainable, and of which the knowledge when obtained is of little or no practical use. Some remarks on the causes of this very mistaken view of Mental Philosophy are given in the Introduction to this volume; and, therefore, we need not recapitulate them in detail, or add others.

But still, as there are steps in the progress of life at which it is not only desirable but absolutely necessary that we should glance back at our former experience for direction in what we wish to do, so there are steps in the philosophy of mind at which it is necessary to glance back to those precautions for guidance in that which we seek to know; and, as the confounding of the functions of the body and those of the mind is the chief cause of the imaginary perplexity, difficulty, and inutility of the science, the steps

at which a reference to the precautions is especially necessary, are the connexions of the body and the mind, and the transitions from the part of the compound phenomenon which belongs to the one of them, to that which belongs to the other.

In treating of sensation hitherto, we have confined ourselves entirely to the impressions made on the body generally, or on particular organs—leaving mind out of the case as completely as if there were no such existence; and we have endeavoured to show—satisfactorily we hope—that if there were nothing more than the body and its susceptibility of sensation, there could be no knowledge, even of the simple fact of the existence of any thing external of the body, or of the body itself; and we have shown that if man were so narrowed in his capacity, he would be a being which could not maintain his existence — could not by possibility exist.

The bodily results of sensation are mere feelings, produced only by physical causes acting on the body generally, or on some part or organ of it, lasting only while the cause continues to act, and then passing away, never again to return. These causes are all external of the parts affected — even though the affection may be one of many of the internal structures of the body; and consequently the body, though adapted for receiving the impression of the cause, has no part in making that cause to operate. Those who are of delicate frame, and but little exposed to the open air, are little able to bear it, feel all the changes of the weather, with perhaps more nicety to the minute ones than even the best of our meteorological instruments. But though persons of delicate constitutions, or who have grown the seeds of their own daily misery in the hot-house of luxury and indolence, are thus sensitive to even the most trifling

changes of the weather, yet nobody would be so absurd as to say that they have any influence in producing those changes, or even in the specific effect which any one individual change has on their system. They do not, in any way, produce the changes of the weather, or increase, diminish, or alter the energy of those changes as causes producing effects upon the human feelings, or upon any thing else: they merely increase the susceptibility of their own bodies to the action of the atmospheric changes; and the feeling which is produced in any one case has not, in itself, as an individual feeling, any influence upon, or connexion with any other one, whether the periods at which they alternate with each other be long or short.

It is the same in every other case. The bodily sensation is in itself a mere feeling, wholly indefinite in its causes, its locality, and its nature—any farther than the simple fact that it is pleasurable or painful; and even the extent to which it is either the one or the other of these, depends upon circumstances, in which the body itself has no influence. The necessary consequence is, that even with the same organization which the body has now, and upon the supposition that it were in the most healthy state, and all the parts of it capable of obeying the action of causes upon it in the very best manner, if there were no mind—nothing in addition to the simply sentient body, the affections of all the senses would be reduced to simple feelings of one general sense — the sense of being alive, which would be agreeable or disagreeable, according to circumstances, but nothing more. Without mind, therefore, the whole human race would come within the description given of those who stubbornly resist the lessons of wisdom and experience, only it is vice in the case of these, while in the case of not mind existing, it would be only simple misery:— they

would have eyes, but they would not see; ears, but they would not hear; and hearts (general susceptibilities to physical impressions), but they would not understand.

Yet still, vague, unconnected, fleeting, and utterly barren of knowledge, as these results of mere physical impressions on the body and its organs of sensation are, they are the primary sources of all our knowledge of the material world and its phenomena, and the foundations of all the knowledge that we can obtain for ourselves, by our own means, of those beings to which we cannot ascribe the properties or the phenomena of matter. We begin with them in actual life and experience, and so, if we do not also begin with them in our inquiries into the nature and phenomena of that part of our nature which is the instrument of all knowledge to us, our speculations are foundationless; and so, with whatever semblance of ingenuity and system we may attempt to build them, they have no stability, and no usefulness.

Any attempt to trace sensation up to the very first feeling of the infant, to ascertain the period of its organization and growth at which that feeling is experienced, or to say when, in what manner, or by what means, the mind first begins to take part in this matter, would be in vain. The shades of obscurity are, to the full, as thick around the beginnings of life as around its final close, and we have no more knowledge of the state of sensation and mental affection in the unborn infant than we have of those of the departing when in the very article of death, out of which none comes to give us information. There are some physiological circumstances which would lead us to conclude that as the fœtus is much less liable to injury than the infant after it is born, so it is much less sensitive to impressions

of every kind; but the subject is an obscure one, and not fitted for popular disquisition.

The probability is, that all the feelings before birth are simply pleasurable or painful,— as from its place and position there is little that the fœtus can learn. Immediately after birth these feelings begin to show themselves; but, at the very first, those showings, which are little else besides crying when pain is felt, and quietude when pain ceases, probably have little or nothing in them different from such expressions in animals. The expression of pain, as being the one that is most necessary for the preservation of the infant, is the first that is displayed; but it is not very long till there are also indications, though very slight ones, of a sense of pleasure. This is expressed in that half-formed and evanescent smile which plays so sweetly on the lips of an infant which is properly attended to, and which, as there is nothing analogous to it in the young of any other animal, may be regarded as the first action of any part of the body which is strictly and peculiarly human. That this primary smiling expresses the comfortable or pleasurable state of the body in itself, and without the slightest reference to any external cause—even in cases where there is such a cause,—is proved by the fact that the smile at first occurs most frequently when the infant is asleep. This shows that the participation of the mind in the affections arising from the physical state of the body has begun at this very tender age; but the beginning is so slight as not to tell us any thing beyond the simple fact that it has taken place.

This takes place while there is not, as yet, the slightest perception of external things perceptible by any one demonstration; but previous to that, the infant is obviously very much employed in schooling itself into a knowledge

of its own body. The muscles,— such of them as are in after-life to become the organs of what is called "voluntary motion," though, in their more early stages, the motions of the limbs are what we call "involuntary," that is, they are not directed to the accomplishment of any object open to our observation,—are schooled thus early.

But we must not, on account of our inability to see it, allow ourselves to conclude that these early motions of the infant, which are most conspicuous in the limbs and fingers, are without a use, and that a very important one. They are the preparations of the body for external observation and action, and without this preparing, these could not be begun, unless with great difficulty. We accordingly find that, if infants are constrained and confined in the use of their limbs *to themselves*, and before they begin to attempt that use in external action, they are always much more slow and awkward than those that are allowed to have free motion whenever they are so inclined. The physical constraints which are sometimes put upon infants have thus a double means of mischief in them,— they injure the strength and tone of the body, and they retard its education in the first, and for that reason the most important step.

The knowledge which the infant thus acquires of the motive organs of its body, and which is of such a nature as that no teacher can assist in the acquiring of it, is not the knowledge of the member—the size, or the form of the parts, or even that of their separate existence. It is the knowledge of their use, which, though vastly more important than any of those other kinds of knowledge, is not connected with them so as that it either depends upon them or they upon it. Nobody is perfectly acquainted with the mechanical structure of the human body; there are few

that have even a moderate knowledge of it; and there are none that can estimate the results of all the combined actions of the parts of so very complicated a fabric; but this first mechanical knowledge of the infant is an acquisition of every body, unless there is malconformation, disease, or improper treatment to prevent it.

The actual motion of the finger, the limb, or the other member, is the only means which the infant has of acquiring a knowledge of its use; and as this is knowledge, and very useful though very simple knowledge, there must be a mental process connected with it. Let the motion be that of ever so small a member, over ever so limited a space, there must not only be a succession of different feelings produced by it, but the number of feelings in this succession must be greater than any art can estimate, or any arithmetic sum up; every change in the position of the part moved, and the state of the apparatus which moves it, must give rise to a different feeling. These differences are, no doubt, very minute—quite infinitesimal to outward observation; and when we have once learned the use of the member, we disregard the particulars, and think of the process only as one whole, just as we do in all other matters; but at the beginning, and till we have acquired this knowledge, our attention to the details is absolutely necessary.

Indeed, it is the extreme brevity of the individual feelings, and the closeness of the succession in which they follow each other, which are the very means by which the infant converts the succession of them into a knowledge of the act, so as again to be able to repeat this act. And, simple as this may appear, it could not be done without the part that the mind of the infant takes in the process; for otherwise the feelings would pass away, once and for

ever, just as fast as they were produced, so that, though the first of the series were again to occur, it would not suggest the second. But, by their being made mental, the first no sooner occurs than it suggests the second; the second suggests the third, and so on till all the number is repeated. And, as the process of this very elementary self-education goes on, the knowledge augments, and the experience improves, — the suggestion becomes more extended in its range, and any one feeling in the now well-known succession suggests an increasing portion of it; and, in no great length of time, it suggests the whole.

Nor does the progress stop here; for the one feeling, or train of feelings, suggests another in a way which is not difficult to be understood. The hand or finger of the infant, after the motion of it is known as one operation— that is, as suggestible by one feeling — comes in contact with some other part of the body; and this feeling is the beginning of a new train, connectable and connected with the former in the order of succession. After the senses begin to receive impressions from external objects, the new feelings which those excite take the lead in other trains of feeling; and the process of self-education goes on, slowly and blunderingly at the first, no doubt, as it is in its earlier and more simple stages: but it does go on, and the infant, which at one stage of its life was totally ignorant even of its own existence, may, if this course is rightly followed up, not only reach the ultimate bounds of existing knowledge, but contribute greatly and successfully to their extension. Such are the simple principles of the acquisition of knowledge, from its most rudimental beginning, to the greatest extent to which it can be carried; and though it is not necessary to advert to this in every instance in which we endeavour to trace connexion between the body and the

mind, yet some acquaintance with it is necessary in order to enable us to enter with effect upon this, the most difficult part of Mental Philosophy.

There is another circumstance to which it may not be irrelevant to allude,—namely, that the rapid succession of the several feelings which make up the moving of the finger, or any of those matters which are first known in the self-education of the infant, is no bar whatever to the mind in keeping up with them; for, however quick the bodily feelings may be, they are necessarily slower than those of the mind, for these, as we have already mentioned, are quite instantaneous—wholly independent of time. It is this extreme rapidity which gives the mind one of its greatest advantages; because when once any succession of feelings obtained from sensation, or of any elements whatever, becomes a mental matter, the most minute portion will suggest the whole train, however large, with the same ease and in the same time. The appearance of a single hair will suggest the whole appearance, character, and history of a friend in whom we once took an interest, though this friend has been long absent, and even if he has been long in the dwelling of the dead; and not only this, but it will bring before us instantly, and as vividly as if we saw them with our eyes, all the scenes and all the adventures in which we took part together.

Yet farther, there is an aptitude in the mind of the young to receive the impressions of the feelings of the senses, which becomes relatively weaker, so that it cannot be so much depended upon, in after-life. Every one who has attended to the developement of the faculties in children—and there are few studies more pleasing—must have noticed how pertinaciously the little things remember. The younger they are, this tenacity is the stronger, which can

arise only from every feeling of sensation being made invariably and surely a mental possession; and hence we may suppose that, at the very dawn of knowledge, this attention of the mind to the feelings of sensation must be perfect.

Nor is it by any means difficult to see upon what principles this must necessarily be the case. In its nature, or essence, the mind can have no change, can have no feebleness of infancy, and no decline in age; for if it could by possibility be subject to any of these, the badge and character of immortality would be gone, and it would be brought within the class of mortal creatures, and would not only be liable to death, but would die. But this mortality would involve the necessity of time to pass over space, physical power to overcome obstacles, a successful resistance of this power by obstacles sufficiently stubborn, and other qualities which are incompatible with those well-known phenomena of mind which are open to the observation of every one, and which no one who thinks but for a moment upon far-extended space or long-continued time, can either doubt or deny.

The mind must, therefore, be always occupied, at all ages and under all change of circumstances, either with its own thoughts, or with the immediate feeling resulting from the sensations of the body. We are not acquainted with any subjects of thought, except those which are furnished through the medium of the senses, or formed upon these by the *Internal Affections*, of which we shall take some notice hereafter.

In early life these internal subjects of thought must be few; and at the very beginning there can be none. The consequence is not only obvious, it is inevitable. In early youth the mind has nothing to distract its attention from the evidences of the senses; and thus children, before they

are called upon to enter upon any regular course of learning or occupation, by which their minds shall be occupied and the trains of their thought directed into particular channels, are very much creatures of their immediate sensations. There are some useful lessons in the conducting of children—and to persons of more advanced life, which naturally force themselves upon our attention here.

If children of very tender age are sent to regular studies or occupations, more especially if the one or the other is of a mechanical and "by-rote" character, they are so sent at a very great sacrifice of their future ability and usefulness. The period of life when every object of the senses tells upon the mind, is the time and the only time for acquiring a quick and ready habit of observation; and if it is passed over without improvement, there occurs in future life no substitute which can supply its place.

In the case of one who is thus situated, there must be some stimulating circumstance of more than ordinary power, such as cannot be expected, far less calculated upon, in the ordinary course of human events, before he can attain to eminence in any way, because his inobservant habit, which becomes more confirmed as he advances in age and the natural fondness for observation slackens, must prevent him from seeing, and consequently from profiting by, those little circumstances that form the steps of the ladder by which some men climb to eminence, and leave their former equals far below them. Such a party is also more liable to be carried away by the momentary influences of his passions, when he gets to such an age as that they begin to display their strength, than if his habits of observation were stronger, and his subjects of thought more numerous and varied. This appears, indeed, to be one of those beautifully-adapted parts of the constitution of our nature, of

which we find so many instances, when we examine the subject with the requisite degree of attention, and all of which are so well calculated to promote our comfort and happiness in the world, were we capable of knowing them and turning them to the proper account. The fondness for observation, which is so strong in early youth, tends, if proper advantage be taken of it, to restrain that liability to be led away by the passions, which is so often productive of disastrous consequences in the more advanced period of young life.

Mental pursuits and regular employment, if not of too monotonous a kind or begun at too early an age, have the same kind of beneficial tendency; and as each of these makes the party his own guide, he feels all the inspiration of independence, and is far more certainly in the way of success, than if he were in the leading-strings of all the guardians in the world, without any impulse within to respond to their counsel, and, therefore, despising it at all times, ready to break through it when occasion admitted.

But there is danger on the other side also: for this readiness of the mind to attend to every impression on the senses, though the appropriate business of childhood, is only the relaxation of after-life; and thus, if it continues for too long to be the predominating occupation, it tends to produce a lightness and frivolity of character, which, though they certainly do not, to any extent at least, lessen the happiness of the party, yet stand in the way of his eminence and usefulness.

We have availed ourselves of this casual opportunity to introduce these few practical illustrations, in preference to setting apart a specific section for them, in order to avoid even the appearance of lecturing the reader, which has always a pedagoguish, and, therefore, an unpleasant effect.

Our chief reason for introducing them at all has been to show that Mental Philosophy, instead of being an abstract and dry scholastic matter, has not only an immediate bearing upon our success and conduct in life, but has really, if rightly understood and applied, more useful influence in some of the most important of all cases than almost any other branch of study.

SECTION VII.

DESIRE—WILL—ATTENTION.

The remarks which have been made in the section immediately preceding are somewhat desultory and discursive. But the nature of that branch of subject to which it relates, rendered this a matter of necessity and not of choice. The whole of Mental Philosophy, as a part of general education,—that is, as tending to enable human beings to conduct themselves in the most pleasant and profitable manner, may be epitomized into one single train of bodily and mental processes,—namely, that which extends from a primary impression on the senses to the right performance of that action of the body, which is the final conclusion and result of the train.

If we properly understand the nature of the body and that of the mind, there is not much difficulty in forming a tolerably correct notion, at least as far as our understanding goes, of that part of the train which is referable wholly to the one or to the other. But in the transitions from the one to the other, there are difficulties of no ordinary kind. The two are so different in their natures, that they cannot blend with each other, or even meet, as matter meets matter, or as mind meets mind,— as one sense of the body meets with sympathy from all the other senses, or as one train or portion of a train of thoughts suggests other

portions and other trains; and as the true philosophy of every portion of a subject must comprise the very same difficulties which are comprised in the subject itself, we cannot separate these transitions from the rest of the train; and treat them as subjects of philosophy, as we can do either the part which belongs to the body, or that which belongs to the mind.

In the second or reciprocal transition—that in which the train of succession passes from being an operation of the mind and becomes an act of the body, the difficulty may be got over, on the consideration that, as the body is passive to external nature in its sensations, much more must it be passive to the influences of the mind in its actions.

But in the first transition — or that from the bodily feeling to the mental perception, there is much more difficulty, as we cannot so easily understand how a passive body can of itself influence an active mind; for this is tantamount to a field of itself influencing the cultivator, or a tree of itself influencing the woodman.

Indeed, these comparisons are probably as much in point, and bring us as near to the case as we can by any means approach. The field and the tree do not of themselves actively invite the farmer and the woodman; but their adaptations to desired purposes make them come of themselves. This is a passive invitation, no doubt; but we often speak of it as if it were active, without any very evident use of figurative language. The abstract desire of the farmer to cultivate for a crop, and of the woodman to fell trees for the sake of the timber, are not the immediate causes of the selection of the particular field, or the particular tree; for the choice depends on the fitness

of the field or the tree, the possibility of obtaining it, and the other circumstances of the particular case.

This is, in part at least, an explanatory analogy — the only kind of explanation which we can obtain on a subject which furnishes no data of its own and has none to furnish. For we know nothing of the mind—even of our own mind, but its thoughts; and as we do not know the thoughts of others, except by their actions, we are obliged to have recourse to what may be regarded as the very simplest state of that which we wish to know—namely, that of the mind when the very earliest feeling of sensation occurs in the body and affects the mind, which necessarily leads us to the most rudimental stage of life.

The case here is, from its very nature, an imagined one, as it cannot be observed in others or remembered in ourselves. There is nothing to suggest the very first affection of the mind any more than there is to retain any one of those momentary feelings of the body of which the mind takes no note. But at any after time, when there are trains of former thought which the mind has experienced, and which may or may not return in suggestion, the matter is far more difficult, whether we attempt to explain it in the case of another person or in our own.

Habit may guide us in so far, but as a guide it is not infallible; for people of the most apparently stubborn habits occasionally break through them in ways for which we cannot account; and as in them we have only the result to judge by, we are in possession of nothing that can connect the primary sensation of the body with the mental affection. Even in our own case, and with the utmost circumspection, we are not certain of all the trains of former thought, that is, of all the results of former experience, which may influence us in any particular instance.

In many cases, especially those in which the result turns out contrary to our expectation, suggestions of what we knew beforehand, but which did not rise to our aid at the time, rise amid our regret, and embitter it not a little.

The primary affection of the mind in the infant is free from this uncertainty; for by the very notion of mind, in the only understanding that we can have of it, the mind cannot remain inactive if it has any one subject of thought; but in the case of the primary affection, there is but that one affection which can occupy the mind, and, therefore, as matter of necessity, the mind must be occupied with this affection. This does not explain the nature of the connexion between sensation and thought, but it furnishes us with the only instance in which the mental affection must follow the feeling of the sense; and this is the utmost extent to which we can go upon the subject.

Thus much being said in explanation, or rather for the purpose of showing that this part of the subject does not readily admit of explanation, we shall now proceed to take a summary view of those mental states which are the principal forms of the affection of the mind immediately consequent upon sensation; and the ordinary names of which are, Desire, Will, and Attention,—as enumerated in the title of this section. These have often received the name of *powers* of the mind, though they are clearly nothing but states, and states which cannot be primary, but must follow some antecedent state in the order of succession. Hence, in order that the occurrence of any of them may be possible, there must have been previous trains of thought of some extent or other; and thus none of them could follow immediately, and without farther experience, that primary affection of the mind of which we have spoken. Each of them must be the result of a mental process, and the only know-

ledge that we can have of a mental process is, that it must be the comparison of two states of the mind, and the establishment of a conclusion upon the relation discovered by that comparison. The feelings of consciousness and identity, which are mental feelings not results of any particular external causes, but which are known only as instantly, but not in all cases, following other mental states, cannot in themselves become members of any of these comparisons. Those simple mental feelings, though feelings of existence, are not necessary consequences of it, because they do not arise in every case of a cause, either in an external or an internal affection; and, therefore, though we cannot conclude any thing very positively upon a point so very abstract, we are unable to prove that every human mind may not have existed from the very instant of creation, quite unaware of its existence, until awakened to consciousness through the medium of the body. We by no means say that such has been the case, because there can be no proof that it is; but that it has not, stands just as much in want of evidence. Upon these obvious principles of the case, the mind of an infant which dies before sensation has imparted any affection from which consciousness could arise, must pass away like a dream, though into what state, or whether again to be called into a new connexion, we have no means of knowing.

In after death the case is far otherwise; for, if the mind has once been in possession of knowledge, be that knowledge what it may, it cannot be again dispossessed. Any portion may lie dormant for a time, and while the mind is pursuing other trains which have no such relation to this one as that the one may suggest the other; but, once in possession, the thought will not finally quit, and the more we desire to forget it, it only cleaves the faster

and returns the more frequently. These considerations have, however, a more obvious connexion with the internal affections of the mind.

DESIRE.

This, and the other subjects named in the title of the present section, cannot strictly be called affections, because, whether they have their origin in mental states or in any thing else, they do not come from impressions of any kind which have their effect in mental states: they are *outgoings* towards something which is external, and, therefore, they are called EMOTIONS, a term which is nearly synonymous with "outgoings," only it does not necessarily imply that there is any actual outgoing in the particular case.

DESIRE seems to be the earliest and the simplest of all those emotions in which the thoughts are directed towards a result,—or the very first movement of thought which has even a tendency to action. The original meaning appears to be the fact of "coming down," or falling, originating in that which falls, and not in any thing else; and although such explanations are not very much to be relied upon, there is something in this one;— the state of mind immediately preceding the desire is the comparison of its own thoughts; and in the desire, it "comes down" from this purely mental state to a *wish* of possessing or not possessing, and it is this wish which renders the state of mind that to which we give the name of a desire; and, the general name for all desires is the singular number without any article—DESIRE—according to the common usage of the English language.

In the most elementary degrees in which we can imagine it to exist, desire can scarcely be considered as, in any way, a mental affection; and probably in these elementary

degrees, many of the animals have it as well as man. It will be recollected that, according to the definition, desire, even when it is connected with mind, is not the mental state itself, but a certain sequence or accompaniment of that state. It is accordingly a very variable matter, and depends much upon the mental state of which it is a concomitant, and the only object to which it is directed.

Its simplest form can be best understood by reverting to what we have described as being the effect of sensation upon the body itself, without any reference to mind. That is merely a pleasurable or a painful feeling; and as all animals are endowed with some means of self-preservation, something like a desire for the pleasurable, and to avoid the painful, seems to be involved in the simple possession of sensation.

But this simplest form of desire, which has nothing mental antecedent to it, does not imply the least knowledge of that which is desired, or even the fact of there being any object of desire. The instincts of animals, being part of their physical nature, as well as the desires and the sensations in which the desires originate, are ready in all cases to lead the animal to that which satisfies the desire. But, as human beings are without those instincts,—excepting perhaps the instinct of the infant for that food which physical nature provides for it, as it does for the other animals, they are quite "at sea" as to the objects of their desires, and incompetent to the gratification of them, until the mind is so far connected with the bodily sensations and feelings, as that it can discriminate the objects of desire and the means by which those objects may be obtained. Whether the objects in themselves are, in the fair judgment of well-established experience, what ought to be desired, and also whether the means which are made use

of for the purpose of attaining them are the proper ones or not, are matters of after-thought; and considerable experience and exercise of the mind are requisite before we can come to any certain and safe conclusion.

In the early stages, and before there are any trains of former thought with which the present objects of the emotion can be so compared as to enable the party to judge of the propriety or impropriety of gratifying the desire in the way in which it prompts us, the perception of every object which makes a strong impression on the senses appears to be immediately followed by a desire of that object, the strength of which desire is regulated by that of the immediate impression on the sense, much more than by any mental process whatever. Thus, infants, when they "begin to take notice," as we term it, instantly desire and stretch out their little hands in an attempt to obtain every bright object that they see. The kind of object does not seem at all to enter into the case; for the flame of a candle in an apartment otherwise dark, is one of the objects at which they grasp most eagerly. The possibility of obtaining the object seems to have just as little influence; for they strain just as eagerly to get hold of the moon as of an object which is within their reach.

With them the chief, and almost the only *motive* of the desire—that is, "that which moves" them to the attempt—to seize hold of whatever makes a strong impression on the sight, is the obtaining of food; for if the object can be seized, it is conveyed indiscriminately to the mouth, without any regard to its qualities, or the effects which the receiving of it then would produce. A flame, the most dangerous weapon, or the most deadly poison, is the chief object of desire, if it happens to be the brightest that is in view.

The objects of the other senses generally, and also those

of sight in many instances, produce on children at this early age only the simple feelings of pleasure or pain. Harsh and unwonted sounds make them start and cry, while those which are soft and sweet, or with which they are familiar, sooth them, and lull them to tranquillity and repose; and, in so far as we can judge, in cases where our evidence is so very scanty, the impressions on the other senses follow the same law. If a taste, or an impression on the general sensibility of the body, either from an external cause or an internal one, is painful to them, they cry; and if it is the contrary, they show their little signs of pleasure. In as far as we are able to judge, human faces are the first objects of sight which produce emotions of positive and negative desire, or, as they are often called, of Desire and *Aversion;* and the same law is followed in the case of them as in that of sounds. In both, pain and aversion predominate in the case of what is strange. It is customary to say that children are good physiognomists; and they certainly can be very differently affected by different expressions of the same face; but these are to be regarded as simple emotions, not founded upon knowledge, or in any way indicative of the character of the parties, any farther than that the expression of their faces is pleasant at the time. If a murderer comes with a smiling face, the infant welcomes him with the same smiles as if he came to fondle it in the most gentle manner.

This smiling and crying, on the part of the infant, at different faces and different expressions of the same face, is an emotion in which mind has very little concern; but after a time there comes a smile of recognition, antecedent to which there must be a mental process—a comparison of the present feeling with a past one. Still the line of distinction between the emotion arising from mental percep-

tion, and that produced by instinct, is not easily drawn even in this case. There is no recognition more fond than that of a dog to his master; and many animals display fondness and aversion in a similar way. Their emotions, however, are of the same kind with those which arise from the feelings of sensation in the child before the mind begins to take any share in the process; and whatever may be the animal emotion, it arises immediately upon the sensal perception, and the effort to satisfy the desire is just as immediate upon that emotion itself.

It is at this stage of the inquiry that we can most advantageously advert to the leading difference between Instinct and Reason. Instinct implies, that whatever is desired and done has the whole of its motive or cause "originating in," and the emotion or act "springing out of," the present affection of the sense, without any reference to the past as a standard or rule of action, or to the future from any fear of the consequences. Reason always implies a comparison, and the finding of a relation — an agreement or disagreement between the subjects compared; which is, in fact, the meaning of the word. Useful comparisons can be made between such subjects only as have so many points of resemblance that we consider them of the same kind; and in the exercise of the mind, it is one or other of these points in the case which is present, which suggests or brings to remembrance the former case, as the standard of comparison. If no such standard is suggested, then we are, as the common expression has it, "at our wit's end;"— we know not what to do; and are, in fact, thrown upon the animal desire, without the animal instinct to guide us. Immediate gratification, without the slightest regard to the consequences, or even knowledge of them, is what the animal desire calls for; and if we have no judgment of

reason to interfere and "give us pause," we must obey the call instantly and to the full extent of our power, even though our instant destruction should be involved in it. Instinct helps us a little, and the sense of pain has a tendency to retard us where personal hurt ensues; but the emotion of desire is often far too strong for these animal restraints, and even for allowing those mental suggestions to arise, which would guide us if we were less excited.

In the animals, each one is wholly formed for a particular mode of life; and it is furnished with instincts fit for its direction in all the ordinary cases of that; but animal excitement often gets too powerful for the restraint of instinct, just as human excitement becomes too powerful for that of reason. Yet, when an animal has suffered from the violence of its excitement, it feels no remorse, as we do in such cases; for there is no suggestion to arise and reprove it for the neglect. The instinct, like the animal feeling, is passive,—never coming into operation without an existing cause, external, or within the body of the animal; and whenever this cause ceases to operate, the instinct and the feeling, in so far as they relate to the particular cause, are gone, never to return,—though the same feeling and the same instinct may return again and again, only there must be a fresh cause every time. In them, the one case never becomes the cause of another case, or has any influence whatever upon it; and thus, literally and in every case, "the memory of the beast perishes."

But the offices which animals have to perform in nature are varied, and many of them have to exercise so much of what we call "stratagem," in finding their food, protecting themselves from danger, and other parts of their economy, that we understand them very imperfectly, and so fall into mistakes concerning them. We, notwithstanding all our

reason, cannot perform the same feats as they do; and hence we are apt to conclude that in these cases they have more reason than we. But when we do so, we forget that these are the special purposes for which both their organization and their instincts adapt them, and that instinct neither needs nor can receive any teaching; while, with the exception of a few actions of the muscles indicating simply pleasure or pain, we do, and can do, nothing but what we have learned by experience or teaching.

As in our case, so in that of the animals, all the functions and feelings of the body, and whatever is dependent upon these feelings, vary with circumstances—such as the climate, the state of the atmosphere, the quantity and quality of food, and many others; and these, when rightly examined, are quite equal to the explanation of every instance which ignorance on our part supposes to arise from memory and judgment in animals.

We ourselves are very much creatures of circumstances; and from the very care which we take of our bodies, it is highly probably that physical causes have more effect on them than on the bodies of other animals; and in proportion as the general feeling of the body is more acute, the feelings of sensation, and the desires arising from those feelings, must be stronger also. The strong and healthy organ performs its office best, and suffers least fatigue or uneasiness in the performance of it. We, by having more resources and more susceptible frames, can adapt ourselves to a greater variety of climates and other circumstances than any of the animals; and in the physical part of the matter they follow us, very nearly in the order of their resource and susceptibility.

Farther, as every infant starts in life, with the animal feeling and the animal desire only, this feeling and desire

accompany every human being through life; and it is much a matter of education — either by the individual or by others—whether the animal shall or shall not predominate throughout, and form at all times the leading feature of the character. Animal gratification is at many times the ruling motive with most men; and there are not a few in whom it is imposible to trace any other. This animal predominance forms no part of Mental Philosophy, properly so called; but we must know it, and bear it in mind, in order to reconcile the facts, as we feel them in ourselves and observe them in others, with those more mental conclusions to which we are led by our philosophy. It is highly probable that want of knowledge or of recollection upon this part of the subject, is one of the causes why the Philosophy of the Mind is so much neglected; and why any other subject, however trifling, useless, or injurious, is preferred to it, both in public education and in private study.

From what has been stated, it will be readily understood that desire is distinct from both bodily feeling and mental perception; and that it may accompany either of these, or both of them jointly, in all their combinations. Every desire is a consequence, not a cause, and, therefore, there can be no *original* desire, that is, none which can come of itself as the first in any train of succession; and we may call it a bodily desire, a mental desire, or a mixed desire, according to the affection out of which it arises. We also name desires after their objects, as the Desire of Money, the Desire of Fame, and so of others; but these are complex desires, in all of which the internal emotions of the mind mingle, to a greater or lesser degree, according to circumstances.

But there are some modifications of desire, to which

names are given, and which have no direct reference to the nature of either the affection or the object; and it is necessary to take some notice of them.

WISH is the first and most simple of these modifications. It may be ever so varied in its object, but is what may be called "barren" desire, for, before there be even the resolution or purpose to act upon the desire, that desire must be stronger than a wish. A wish is, indeed, the most indefinite of all emotions. As to time, it may in its object be past, present, or future, and that object may be any thing — any being, quality, feeling, or want, whether real or imaginary, possible or impossible.

WILL, like wish, is in itself a simple emotion, but it has a more definite character. When the desire is accompanied with so much knowledge of the object desired, and of the succession of events by which that object is attainable, as to call in a new element—a BELIEF that the object can be attained by the means that are known, then, but not till then, the wish becomes Will. The short definition of a will is, therefore, a wish accompanied with the belief that it can be accomplished — that the result wished for, whatever it may be, can be arrived at.

Still, between a vague wish, and a fully determined will, there are many intermediate emotions partaking of the characters of both. Belief is, in all cases, founded upon evidence; and as a man cannot be evidence in his own case in logic any more than he can in law, his belief must be according to the evidence which is before him at the time. Its correctness or its incorrectness, in an abstract or absolute point of view, depends upon the nature of the evidence; but whenever the evidence satisfies the party, there is belief, and this belief turns the wish into will. But, if the evidence is not altogether satisfactory, then

there is DOUBT and not belief, and the emotion is an uncertain one, which vacillates between wish and will, without being exactly either of them.

The evidence may come either from without or within—from observation at the time, or from former experience, which may or may not be suggested, as the case may be. The evidence of the senses, or the other means by which we come to the knowledge of that which is the subject of the will, are the facts of the particular case, and the mental suggestions are the law. If, among these suggestions, there arises one which is exactly parallel to the case under consideration, and the result in that one has been what we wish, the belief is confirmed, and we act accordingly; but if there are differences we are in doubt; and we cast about for some means by which this doubt may be removed; and this gives a new form to the emotion.

ATTENTION is the name which is usually given to this modification of desire. It literally means "on the stretch"—straining in quest of some object or other; and this is generally some species of knowledge which, we believe, would, if we could obtain it, change our ignorance and doubt into such knowledge and belief as would amount to a CONVICTION that the desired object could certainly be obtained by the means known; and upon this Conviction we act with CONFIDENCE, that is, with "faith," or perfect reliance upon the result. Conviction means that we have overcome or mastered the case, and "hold it captive" in the chains of the knowledge we have of it. This may not be the case in reality, but it is so to the best of our knowledge and belief, and if so, then we ask no more. If it is not, we endeavour to make up the deficiency; and ATTENTION is our state when we are doing this.

Though Attention is thus only one of the many modifi-

cations of the emotion of Desire, it has often been called a power of the mind, and discussed and descanted upon as such. But, instead of being a power of the mind, it is not necessarily mental at all; for, like desire, of which it is a modification, it may belong to the body only, and it does belong to many animals as well as to man,—a cat watches a bird or a mouse, a dog beats about for a scent or follows its game, and even a trout watches for flies, with as close attention as the most profound philosopher. Owls are most assiduous and successful preyers, not by courage but by craft—at least in the far greater number of the species; and it is probably from the sedate look which the practice of so much attention as they must exercise gives them, that they have been elevated to the rank of the birds of wisdom;— and the simile is not a bad one; for, like owls, abstract philosophers sit in solemn meditation upon single subjects—and are very often in the dark.

The cases of human attention, in which there is no affection of the mind, are but few; and they are of little or no importance, as they pass away, and never become the elements or the means of any other state, bodily or mental. Also, as there are some states of mental abstraction so profound that all consciousness of external things is lost for the time; so there are other states in which the senses are so fixed in their attention to external objects, that the mental part of the process is nearly suspended.

In all observation the attention of the senses is especially requisite; and the organs of sense are furnished with apparatus, by means of which they can receive impressions much more perfectly than in their ordinary states. This apparatus consists of muscles; and it so happens that the preparation which these give to the organ actually brings it into a state of "tension"— braces it up, so that the

part which receives the impression is tighter—more on the stretch, than at other times. The eyes are constricted by the lids, and also by those internal parts which adjust the foci to the distance of the object and otherwise fit them for more perfect vision; the ears are erected, if erectible, and if not, all the mechanism is braced up; the nostrils are distended; and while all the muscles of those organs which come into play are excited to the utmost, the rest of the body is motionless. But intelligence, so as to be useful, can come only by one sense at a time; and, therefore, when they are all in a state of excitement at once, as in the extreme cases of wonder and astonishment, the one confuses the other, and very little information is communicated to the mind. If a man is found with open mouth while he is staring at that which is before his eyes, we may be sure that he neither understands, nor is in the way of arriving at the understanding of that which makes him work his features into an expression so grotesque. If the sense which is in exercise is successful in obtaining the information which it seeks, the other senses are tranquil, and the expression is one of pleasure. It is the same in the case of the mind being the chief agent in the attention. If it cannot succeed, there is a painful expression on the countenance, and even in the general attitude of the body; but if matters "go blithely on," it is equally sparkling with calm but apparently exquisite delight. Nothing makes a finer picture or statue than that of a man of talent, when soaring mentally on the viewless wings of successful investigation; and few can be more exquisitely ludicrous than the faithful representation of a moping fool in a brown study.

There are very many modifications of desire besides the ones which have been enumerated; but there are

none of them which are in any instance consequent to an external affection without some sort of mental process; and, therefore, they can be noticed with greater advantage after a short enumeration of the Internal Affections has been made. Of desires themselves, and the modifications to which we have alluded, there are but few in persons come to maturity, in which there is not some mental ingredient; because there are few in which there is not some antecedent of former experience, connected with some circumstance or other in the object of the desire, or that which has immediately led to it; and whenever there is any thing of this kind, there is no power by which the mental suggestions can be restrained. Therefore, even in them, our understanding cannot reach even that very humble degree which is attainable, without some knowledge of the manner in which the mind carries on those operations in which the senses and feelings of the body do not bear any important part.

SECTION VIII.

INTERNAL AFFECTIONS OF THE MIND.

Those states of thought, feeling, knowledge, or whatever other name it may receive, which arise or occur in the mind itself, without the presence of any corresponding external object at the time of their occurrence, are called Internal Affections. They do not, in their elements, originate in the mind, for the mind can no more originate knowledge than the body can create matter; but the mind can resolve the compound ones into their elements, and form elements, whether simple or compound, into new combinations; and by this means those inventions from which society has derived so much pleasure and advantage have been made.

In those cases in which we can best understand and most clearly explain the process, the elements consist of external subjects and events, of all kinds whatever that have come within the range of our observation. And, in the mental operation, their order is reversed: the combination or invention goes on in the mind; and when the plan is perfected there, if it relates to any thing in material nature, the body of the inventor or of others is set to work on physical materials, to carry it into execution by physical means. It is in this way that every step in the progress of all the arts and sciences, and every thing that tends to

elevate the character and increase the comforts of man, from utter iguorance to the highest degree of skill and execution, has been taken; and in this way all future steps in the same progress must be taken. This is not confined to knowledge, and the application of knowledge — to science and art; for it includes manners, morals, political condition,— every thing indeed in which improvements can be made by human means:— all is done, and done without fatigue, and independently of time and space, by that wonderful principle or agent in man, of which dotard ignorance questions the existence, and would number it with the kneaded clods.

If you would know its evidence, look around! See the hills covered with sheep, the meadows thronged with steers, the fields waving like seas with golden harvests, the sprays gay with every bloom, and the boughs loaded with every fruit. Mark the bustle and activity that are every where displayed, and the plenty, the comfort — ay, the luxury which abounds in city, in village, and in hamlet,—in palace, in house, and in cottage. Take note how the scales of ignorant prejudice are falling from the eyes of those whom they long kept in the blackness of darkness,—how man is striking hands with man in the spirit of the most beneficent co-operation, saying, "Go to, let us build an habitation for the arts, and a dwelling-place for the sciences, where they may be secure and may wax strong, and bless, as with the rain of heaven and the beams of the sun, our children and our children's children, until time shall be no more,—and how societies, and institutions, and museums, and every means of improvement in knowledge and in working, are springing up on every side, as though an angel had passed over and sown the land, which human industry had prepared, with the seeds of wisdom and happiness:—

Take note of these and of countless others — among the rest the mighty marvel of communication, by which the whole inhabitants of the British Islands can call and answer to each other in the space of one short week :— and then say that mind is either a doubtful or a barren heritage to those who have paid close attention to its improvement ! We might turn to the reverse, and look at the dark deeds of the days of ignorance, where the animal lords it over the rational being,—we might point to the mangled bodies of the innocent, bathed in blood on the altars of the most unmeaning and abominable idols,—at the victors devouring the flesh of the vanquished, while its fibres yet quivered with life,—ay, and at the word of God's inspiration being prostituted to become the bond of slavery, the scourge of cruelty, the shield of tormentors, and the pander to depravity ;— but we leave the remainder of these things in the loathsomeness of their obscurity, well assured that the time is coming on rapid wing when the power of mental enlightenment shall brush them from even the uttermost parts of the earth.

These are some of the considerations which give to the philosophy of mind so high an interest above all other philosophy. Each science is of value in its department, and society is benefited by them all; but this is the master science,—the doctrine of the means to which all the other sciences, and every art and improvement in the condition of the human race, owe their very existence.

The subjects of our Internal Affections, in so far as they are states of the mind, which return in suggestion, and render up their knowledge as elements for new combinations, and also the mental perceptions of these combinations, and also every perception which the mind can have, except, perhaps, the simple feelings of consciousness

and identity, have been called IDEAS,—a term which has been productive of many errors, and of much wrangling and disputation, equally useless and interminable; and still the word is not only in common use, and therefore the rejection of it would demand the re-writing of many excellent books, which no man could venture to touch in that way without spoiling them; but it is, all things considered, the very best that could be used. Some have proposed the word "notion" as a substitute, but it is more vague, and refers to the knowledge which we have of a subject, rather than to that subject itself. But, in the cases where the use of the word "idea" is proper, that for which it stands is really a subject of knowledge, though a mental one; and the phrase "I have, or have not a *notion* of that *idea*," is neither an absurdity, nor a pleonasm, in which two words having the same meaning are used.

Idea means a likeness, or that which is perceived as such; and, therefore, as applied to the mind,—the only sense in which we use it,—it means the mental perception which we have of any subject of thought, and implies in addition that that perception is an accurate one, a true and faithful representation of the subject of it, in the only way in which that subject can be represented to the mind.

The objection to it, and also the chief error founded upon it, was, when it meant something material—not substantial matter, which could be a part of the external world and an object of perception to the senses of the body, but a sort of intermediate thing, neither matter nor spirit, like the shades of the dead with which the fanciful and fabulous mythology of the ancients peopled the regions of future reward and retribution.

This, of course, arose from a lingering adherence to that

notion of mind, as being a very peculiar filmy kind of matter, until the volume of inspiration revealed those truths upon which a true notion of mind can be grounded; and it was preserved beyond what would have probably been the natural term of its existence, by the erroneous notion of light, which arose out of the overstraining of mechanical philosophy. According to the doctrines, or rather the dogmas of that philosophy, there could be no likeness unless that likeness was a material image, which had some sort of separate existence. Thus, the various colours which light reveals in nature, were material colours which the beams of that light applied to the surfaces of bodies; or that the likeness which is shown in the glass is a kind of filmy emanation from the body, which falls upon the glass, and is, by that, thrown back again toward the eyes. The establishment of the fact that light is not matter of any kind, however filmy, but a modification of action, and not material, has put an end to these fancies; and the fact that we know that we can see a very perfect likeness not in any sense a material one, in a mirror, makes the understanding of the intellectual idea a very simple matter. An irresistible argument to the same effect might have been drawn from the Supreme Being, as soon as the nature of that August Being, as revealed by himself, was known to mankind. But it was not adduced, and probably not thought of.—The Almighty must know, intimately and in every particular, all that exists or happens, and must have done so from all eternity,—is *His* knowledge of any one thing a filmy, material image? The question touches upon impiety, — the affirmative answer would be blasphemy.

An idea is, therefore, nothing more than a mental perception, whether that perception be the effect of something

immediately present to the senses, or a former mental impression which returns in suggestion, or what is popularly, but inaccurately for philosophical purposes, called recollection. We shall endeavour to show in what the impropriety of the popular term consists, when we come to explain the sense in which "suggestion" is used in the philosophy of the mind.

Idea is not only a very appropriate name for a mental perception, but is equally applicable to the perceptions of the senses,—to those compound perceptions in which both body and mind have a part, and in short, to all perceptions whatsoever. In all things, we proceed by "likeness;" and even in cases where the results of our comparisons show differences, it is from the consideration of likeness that we obtain the knowledge of the difference. Our expectations of the future proceed upon likenesses of the past; and it is some present likeness which brings the past back to the mind by suggestion. It is from a likeness, in a plan or in his mind, that an artist executes his work; and so perfectly can an experienced artist carry a likeness in his mind, and so readily can he apply it to practice, that having made or having seen any production of his art at any one spot of the globe, he can carry the likeness in his mind and make a *fac-simile* at the antipodes. Even one who is no practical workman himself can carry off the likeness in his mind, and direct one who is an operator to construct the *fac-simile* for him. All language, whether spoken, written, or expressed by sounds or symbols of any kind to which meaning is attached, consists of likenesses; for the party addressed cannot profit by the addressing party except there is a likeness in their understanding of the terms. Dull books are tiresome, and communicate no knowledge, because the likenesses in

them are not well made out; and the charm of a pleasant and instructive book consists in the truth and force of the likenesses, fully more than in the nature of the subjects. Some writers are more tedious than others, even though the subjects of their writings are of little value; and many writings cannot be read with any satisfaction, even if their subjects are of the very highest importance. But, by the definition, all our perceptions of these likenesses are ideas.

But instead of its being necessary that the idea, or likeness, should be composed of the same materials as that of which it is the likeness, it is no likeness if there is this sameness in the case. One bust or picture, though a perfect imitation of another bust or picture, is not a likeness of it,—it is a copy. In the case of two human beings, although, as is often the case with twins, they may be so exactly like each other, that it is impossible to distinguish the one from the other, we should not call the one twin the *likeness* of his brother, far less the *idea* of him; though, to one who had previously seen them both, the one would instantly suggest the idea of the other, or of the two placed side by side.

It is necessary to have as clear and complete an understanding of the words "idea" and "likeness," as it is possible to obtain, as they are of more frequent occurrence in the philosophy of the Internal Affections than any other words.

The subjects of those affections, in regard to the mind itself, and without allusion to the body or anything external of the mind—in that shadowy notion which we have of the word "external," as applied to that which occupies no space—the subjects of the affections, in this sense, are always ideas, and can by possibility be nothing else. Any instance will serve to illustrate this:—thus, I had a dear

friend, in whose daily society I passed the sunny season of life. Our studies were one, our amusements were one, and we were never separate, when by any means we could be together. But the charms of the world separated us many years ago. My friend went to India, fell a sacrifice to the climate, and the decomposing influence of twenty alternating monsoons has, ere now, reduced his body to the dust. I, too, have been long absent from the haunts of our youth. These haunts, so report tells me, are gone. Of the then inhabitants not one individual remains; the brook which twined so sweetly through the little meadows, enamelled with wild flowers, has been straightened to an artificial drain—poolless, troutless, and void of interest: and the copses, with their wild roses, their briars, their sloes, and their hawthorns, with their lively birds, their chirping mice, and their ever-weaving spiders, are grubbed up to the very last rootlet. Abundant harvests now cover the surface, and in the place of some hundred mud-walled cottages, flung about in straggling villages, there are three or four handsome farm steadings, but so wide apart that the baying of the watch-dog does not reach from the one to the other. In wealth it has greatly increased; but to me it has the poverty of the desert. Well, suppose all this; and the very supposition precludes the possibility that it can again be the same identical reality. But it, and its to me dearer inhabitant, are not only secure in the record of my mind, but I can transcribe that record, and thus make others acquainted with it. Show me but a straw or a chaff, and say that it was procured from a spot situated thus or thus with regard to the hills which man cannot move from their places, and I instantly bring back the whole. My friend comes from his tomb, within the Coromandel emporium, where the city of the dead holds rival-

ship in extent with the city of the living; and he comes in all the bloom and vigour of early days. We are on the daisied sward, by the margin of the favourite pool. The bushes are all in bloom, and the golden branches of the single laburnum hang over the waters as gracefully as ever. And those cheveron waves, rippling the otherwise glassy surface, in diverging lines which extend to both banks. It is the great trout which we have so often essayed to capture, but essayed in vain. O, for a breeze to curl the surface, and a cloud to obscure the sun! Ha! it darkens—it is gone; and I am "a stranger in a strange land," care-worn, and weary of that world which grows young as I grow old. But no matter; I can call it back and enjoy it without interruption from without, after not a stone of the proudest city that man can build has been left upon another.

Such are the subjects which are furnished by the mind itself in all its internal affections, whether the affection be merely a state of the mind, or an emotion directed to some object external of it. They are *ideas*, and while language and truth remain true to each other, they can be nothing else.

In the case which has been given in instance, surely nobody will say that there is even the slightest reference to substance, however filmy, in the idea, — that there is any emanation,—any permanent or general form, after the substance has gone,— visual, tactual, or any thing else. But, whether the idea be the mental perception of that which is making its impression upon the senses at this instant, or whether it made its impression half a century ago, is a mere matter of time, and time of itself cannot change the nature of any thing. The mind, too, is from its very nature quite independent, not only of time, but of all the

events which can happen in the succession of time; and therefore, to the mind, the idea is exactly the same, whether it be of immediate impression from without, or of impression at any former time.

Such, in brief description, and in plain language, is the meaning of likeness, when used in a substantive sense,—or as the name of that which is a likeness, and not adjectively, for the quality of sameness. This is the sense in which a mental perception is called an *idea*, and to this alone the word idea should be restricted.

LIKENESS, or resemblance, in the common usage of the term, is much more vague and general in its signification—or rather, perhaps, the significations of it may be varied without end; but an idea, if a correct or perfect one, is a likeness in every sense in which it can be used; for if the idea varies in one particular from its subject, thus far it is not the idea of that subject, but of another.

In the ordinary sense of the word "likeness," no such perfect coincidence is required, for if any two subjects agree in any one particular, however trifling that may be, and whether it be a quality of the subjects, or an accidental circumstance which has nothing to do with their nature and qualities, still there is a likeness, so far as it goes. The mere circumstance of there being a gold coin, a silver, and a copper one, in a man's pocket as he passes St. Paul's, constitutes between the man, the coin, the pocket in which they are, the cathedral, and also all that each and all of these can suggest, a likeness, of which the curious power of the mind can lay hold, and turn it into an instrument of knowledge.

RESEMBLANCE is perhaps a better word than likeness, for the purpose of obtaining what shall be perfectly intelligible and clear, in this part of the philosophy of mind, and also

in relation to external nature as illustrative of this philosophy. In this, its mental meaning, a *resemblance* is that which can "bring things together again," not physically, but in the perceptions or ideas of them; and in practice, as applied to the external world, we can never say that any object has a resemblance to another without seeing them together, or having the idea of the one which we saw formerly present to the mind, so as to be instantly compared with the idea of the one which is present to the senses. It is, in fact, the resemblance which suggests the idea of the past or the absent one, and brings it out of what we call the store or record of memory, in which it would remain for ever, unless suggested by some resemblance, or quality deducible from resemblance, in the thought with which we were occupied at the present time.

This resemblance between object and object, between an object and an idea, or between one idea and another, is the means by which mental operations are carried on; and though simple in itself, and as compared with the many and complicated subjects which must pass through the mind, in the acquisition and the extension of knowledge, and also in the conduct of life, in as far as that conduct is rational or intellectual, and not regulated by the momentary impressions of the senses and their unreflective impulses, as it is in the other animals; yet it is quite adequate to all the purposes which are required of it.

As applied to the mind, this principle, or rather fact, of resemblance, answers nearly the same purpose as the principle, or rather fact, of Cause and Effect does in the field of knowledge as external of the mind,—only the operation of it is more simple, and therefore it ought to be more easily understood, than that of cause and effect.

In treating of the law, or succession, of Cause and Effect, it is extremely difficult to escape the entanglement of the doctrine of *Power*, as an indescribable something which resides in the object which we call a cause; and which in certain cases that object may or may not exert in producing an effect. We, for instance, speak of the *power* of steam, the *power* of gunpowder, the *power* of the wind, of water, of horses, and of a number of other subjects; but when we come to examine any of these powers, be it whatever it may, in the popular view of it, that is, as a cause which produces certain effects, we find that it is itself an effect and not a cause. There is no power in steam, unless when it is under the *effect* of a certain degree of the action of heat; there is no power in gunpowder until it is ignited by the application of a match to it; there is no power in the wind but the *effect* of some cause which puts the wind in motion; and so on in all the other cases,—when we examine them in themselves, and not in what follow certain states of them in the order of succession, they are one and all of them effects, not causes; nor can we find any one cause, with what is called "an operating principle" in itself, and not obviously traceable to something else, until we carry our train of precedence from consequent to antecedent up to the Great First Cause, without reference to which there is no rest or satisfaction to the mind, after we have once entered upon this train of reflection.

Therefore, in all that is external of us, and in ourselves also in the origin of our existence as beings that feel and know and think,—within the limits not only of the term of our lives, but of every duration short of eternity (which, to us, is altogether incomprehensible, and, therefore, known only as a negative),—the knowledge of cause and effect does

not extend beyond that of an antecedent and consequent; and the fact that these will, in all cases, follow in the order in which we observe them, is regulated in its probability, or the degree of credit that we should attach to it, by the accuracy of the observation, the number of times that it has been repeated, and the absence of any cases of failure among these.

In the case of those primary affections of the mind which we have described as external, inasmuch as they are obtained through the medium of the sensations of the body, we may, according to the view which we take of cause and effect, in matters wholly external of ourselves, call the mental affection an effect of the bodily sensation, and the bodily sensation an effect of the action of the object of sense upon the organ; and thus we may apply to them the same modes of expression of which we make use when we speak about cause and effect in the physical events of the world without.

But when we consider ideas, as merely former states of the mind, which return in suggestion in consequence of some resemblance to its present state, we get entirely rid of the doctrine of cause and effect, and of all the difficulties with which that doctrine is attended. One mental state can no more produce another mental state, than one sensation of the body can produce another sensation; for, unless when it is called back by some suggestion, the mental state is as finally gone as the bodily sensation. It must be borne in mind that, although we speak of both as subjects of thought and of language, yet that none of them have a separate existence, or any thing by means of which they themselves can act, in the producing of a result, or in any way whatever.

A present affection of the mind, which suggests a former

state, or, more correctly, the idea of a former state, cannot be the cause of it; for it is impossible for an affection or any thing coming after to be the cause of that which happened before. Whatever else there may be, the cause must always precede the effect in the order of time, without any reference to that portion of the subject of causation upon which there have been disputes. But if, in the case of some resemblance of a present state of the mind to some past state, suggesting the idea of that state, so that, as a matter of knowledge, the mind can make as much use of it as of the present one, neither of the two can be the cause of the resemblance which it has to the other one. The impressions of which those mental states are the results, are given to the mind by subjects which are external of it; and of which the characters are not communicated directly to the mind, but to it through the medium of the body. If, therefore, the impression which the mind receives is not faithful to the qualities of the objects of bodily sensation, the mental idea is not a faithful likeness of the subject which it professes to represent; and consequently, if we can suppose that any thing new in its essence and elements could originate in the mind, that which so originated would be a mere fancy, and not true, or applicable to any thing really existent.

Even in the most splendid inventions which have repaid the chosen of the human race for years of constant and intense study, not one single element of thought could, by possibility, have been originated by the inventor; and not one can ever so originate. New combinations of the elements of thought are all that can be obtained; and in practical matters, there can be no new combinations without the discovery of new facts.

The original elements which the mind employs in its

operations are very properly called *facts*. A fact is "that which has been made,"—the result of an original effort of creation—a work which can be performed by the Deity alone; for, though we are in the habit of speaking of new facts, yet these are not new in their elements,—they are only new to human knowledge; and though the combinations which these newly-discovered facts enable us to make can be made the elements of farther knowledge, yet such knowledge can extend no farther than the facts bear it out; and every step beyond this which is attempted, is error in principle and failure in practice,—something more than that indeed, for it is failure in the attempt. The mind can produce new forms in thought, just as the hand of the artist can produce new forms of matter, and in the case of the new form of matter there must be a new form of thought before it can be produced; but in neither case can a single particle of new material be made by the worker, —it must be *found*.

This is a point which requires the most careful consideration; because it is one upon which ordinary language is exceedingly loose; and wherever this is the case, we may be sure that information is imperfect and opinion erroneous. We speak of a "creative fancy," and "an inventive head," as if something were actually *made* by them, and without proper discrimination in the use of the terms. *Invention* does not mean creation, or the bringing of something into *original* existence; for the mind is a mere instrument as well as the hand, and both are equally incapable of working unless materials for them are *found*. So that, what we call creative and inventive capacities in men, are nothing more than certain aptitudes for the making of *discoveries*, which aptitudes are in all cases the results of experience—the rewards of

labour, though in many instances the labour is not known to us, and in these we are apt to ascribe the results to a certain mental superiority which they inherit as the gift of nature, and which we, on that supposition, call original genius.

Now this is altogether unfounded in theory, and it is most mischievous in practice. Between one human body and another there may be, and certainly are, original differences, but between minds there can be none. We cannot even imagine an original difference; for we know no original quality of mind, and consequently none in which one mind can so differ from another. In after-life there are differences, and very remarkable ones; but then we must ascertain in what they consist; for if they consist in any thing that is acquired, by necessary consequence they also must be acquired. There cannot surely be any difference of things before these things are in existence? We may say that A. has a black coat, and B. a blue; but if we say this before they have the coats, it is not true—it is nonsense; for it is saying that there is a specific difference between the coats of two men who have no coats at all.

But the notion of original genius, often and confidently as we hear it brought forward, is exactly a parallel assertion to that of the different colours of the two non-existent coats; for when we come to inquire in what this difference of genius consists, we find that one man has more knowledge, and greater readiness in turning that knowledge to account, than another man has, and here the difference of genius between them ends.

Now, every one must admit that the acquiring of knowledge is wholly a matter of observation; for to suppose otherwise would lead to the absurdity that a man knew what he did not know—a position which is not very

tenable, and yet it is the only one upon which the existence of original genius rests. If the knowledge is simply that of external things, then it can be obtained only through the medium of the senses; and if it be of the uses of those things, whether in nature or in art, we are sent back to experience, for we cannot know any one use of any thing otherwise than by discovering it, any more than we can the thing itself. We may, indeed, *desire* a use—that is, we may wish for something that we suppose would make us happier than we are; and this wish may set us to work in order to obtain what we wish, and we may succeed.

Thus far the wish may be, as Shakspeare says, "parent to the thought;" but admitting this, the wish itself must also have a "parent," and this parent can be nothing else but a former thought or a present perception of the senses; and, in either case, the wish is nothing more than a consequence of a certain kind of knowledge, of which we must be in possession. A savage in the woods never wishes for a watch to tell him the hours, a book to read, a service of plate, or a picture gallery: he wishes for food to eat, and a fire to warm him, if the weather is cold; and having obtained these, he wishes to sleep.

If the wish is not the result of a mere momentary feeling of sense, and if it is strong enough to prompt the mind to think of its gratification, then the wish, which is in itself a mere sensation, is intermediate between two trains of thought, or portions of knowledge, of the first of which it is the effect, and of the second it is—not the *cause*, in our ordinary sense of the word, but the motive to that portion of knowledge which comes after. But this after-knowledge does not follow the wish in any regular succession, as event follows event in the external world, or as thought follows thought in the mind. Even of our strong and earnest

wishes, the majority are not gratified; and in not a few of them, the gratification is impossible. Of slighter wishes, there are hundreds which pass away every day, perhaps every hour, without leaving the slightest trace of their existence; and very many of the human race have their minds so constantly occupied with barren and transient wishes, that they have no time either for observation or for thought. Such persons are destitute of genius certainly, but the fault is their own; and that a man is a spendthrift of his mind gives him no title to blame his Maker for not having bestowed it upon him, which is the true interpretation of all the complaints which we hear of want of genius.

The thought before the wish, and the thought after, lead us to the proper distinction between discovery and invention, and also to the natural division of the internal affections of the mind into two great classes, the distinctions of which are of the utmost importance, both in obtaining correct knowledge upon the subject, and in turning that knowledge to useful account.

The mental state which precedes and produces the wish, whether it consist of the suggested ideas of former states, of the knowledge derived from immediate observation, or of the two jointly—which is the more frequent case—is *Discovery;* and the subsequent thought—that which involves the means of gratifying the wish—if such means there be—is *Invention.*

To DISCOVER is merely "to remove the covering," or veil, by which any thing, be it what it may, is concealed from our sight. At the commencement of our being, all things, even the fact of our own existence, are, as has been shown in a former section, covered by the veil of total ignorance, in which state it is utterly impossible that we

can be aware of what is under the veil. If left to our own resources, the extent to which we could remove this veil would be very small; and even after the lapse of ages, and the labours of innumerable discoverers, probably only a small portion is yet known, even by the best informed of our race. Discovery reveals to us that which was previously altogether unknown, and we must take it just as we find it; though a discovery, if an interesting one, so as to impress us much and produce emotion and desire, may lead to other discoveries almost without end, and also to many inventions. The discovery of America by Columbus, though but a trifle in its own extent, has added a new world to our knowledge, and been the primary stimulus to more inventions than could easily be enumerated.

To INVENT, literally means "to find out;" but there is something more required than in the case of discovery. We cannot know beforehand what we may discover; but when we try to find out, we must always do it with a knowledge of what we wish to find. An invention cannot be accidental—that is, without intention and effort on our part, formed and directed for the express purpose—but a discovery may. We can speak of a discovery as being wholly accidental,—and all discoveries are partially so—that is, they fall upon us, or we upon them, without purpose on our part; but we cannot speak of an accidental invention. That the steam of boiling water could overcome a mechanical resistance, and be what we term a power, was a discovery: the various applications of that power are all inventions. The labours of the alchymists to invent a means by which the less earthy metals might be turned into gold, led to the discovery of many of the most important chemical properties of substances; and in a variety of other cases,

where we fail in obtaining that which we wish to invent or find out, we discover what is of more essential value to us. A very simple case will illustrate the whole. We discover that we are in want of a certain article, no matter what, and not being able to see the article or to hear of it, that discovery lies dormant as a barren wish. Some time after, we discover the article in a shop window as we pass along the street. This immediately suggests the idea of our former discovery, and the two together raise the desire of obtaining the article to a motive of action. If we *discover* that we have the money in our pocket, and can spare it, our desire is gratified, and the article which we desired often begins to fall in our estimation; but if we have not the money, we put our *invention* on the rack in order to *discover* how the money is to be obtained; and so long as our invention is thus upon the rack, the article which is desired rises in our estimation.

This illustration, simple and familiar as it is, not only shows the distinction between discovery and invention, but also points out in what the superiority of the latter consists. While occupied in attempting to invent, the mind is kept in a state of constant activity. It has a constant object in view, upon which its attention is concentrated; and therefore all the stores, both internal and external, are searched for whatever is *likely* to contribute to the attainment of that object. The mind acts on its own resources, and also on the faculties of observation of the body; and as it stimulates, so it, by the very same effort, directs. It is the present state of the mind which calls up the ideas of the former states in suggestion: it calls them up by means of resemblances; and if the excitement is powerful enough, it calls up the whole of them, how long soever some of them

may have lain dormant; and by this very means it represses, and throws into the shade, all which have no resemblance. Its effect on the body is similar. The senses are ever on the alert for the discovery of every thing that can promote the object upon which the mind is set, while other attractions of the senses are wholly unheeded. This, like every other exertion, mental or bodily, may be carried to extreme lengths, so as not only to defeat its own purpose, but even to disturb the connexion between the body and the mind, and produce temporary or even confirmed derangement. The cases in which mental derangement is most apt to ensue, are those in which the parties are deficient in mental training and in acquired knowledge; and where, in consequence of these, they either strain after an object which is in itself impossible, or which cannot be arrived at by any means which lie within the narrow limits of their acquirements. The perilous cases are those in which there is only one project of this kind; for if there are more than one, the one counteracts the other. He who dotes upon one project is either a madman already, or in the direct way of becoming so; but he who changes his projects like the wind, equally enthusiastic upon them all while they last, though generally a fool, and always incapable of arriving at any thing useful, has too much levity of mind for ever becoming a madman, unless the malady shall be the result of bodily disease, against which the best regulated mind is not secure. Those who drudge incessantly at the invention of perpetual motions, are mad, every man of them; and those who are equally intent upon schemes, but have a new one with every turn of the moon, are never mad, though never altogether in their senses; but the Watts, the Smeatons, the Arkwrights, and the Wedgwoods, are as firm in mind

as rocks, and, like rocks amid the waves of human trouble and necessity, they throw the radiance of their beacon lights over the world for ages.

Into the other subject—the two classes of internal affections—we must enter at greater length. They are *intellectual states*, in which only ideas or thoughts are concerned; and *emotions*, in which there is an affection towards a future object. These have some resemblance to the external affections, considered as perceptions and as desires.

SECTION IX.

MENTAL STATES—REFLECTIONS ON SOME RELATIONS OF MIND AND BODY.

THE distinction of the *Internal* affections of the mind, that is, those affections of it which arise without any immediate influence of external objects upon the senses, which can be regarded as their causes, or in any way as the sources of them, to which allusion has been made, is not new, even on the part of Dr. Brown, except in the nomenclature which he adopted, and in the care which he took to free it from some sources of mistake and error, which were previously mixed up with it, and which not only changed the characters of some parts of it, but vitiated the whole.

The intellectual states had previously, by many even of those who were supposed to have treated the subject in the most philosophic manner, been called the *Intellectual Powers;* and the affections, in which there are emotions of the mind towards future results, of whatever kind, were called the *Active Powers.*

There are several objections to the use of these terms. They are not *powers* of the mind—not parts or portions of it which can, in any sense of the words, be co-existent, or in operation at one and the same time. They are *states* of the mind, which can arise only in succession to each other; though, in consequence of the extreme rapidity with which

the mind acts, they may follow each other so rapidly, and so completely without the interposition of that mental feeling which we call Consciousness, that the party of whose mind they are states may not be, in the slightest degree, aware of the succession.

The possibility of the mind having separate powers of any kind, is not only calculated to raise doubts of its immortality, but is a virtual denial of its existence; and we accordingly find, that they who have advocated this doctrine of separate powers have always held sceptical notions on the question of immortality, or have stopt short in their investigations, carefully avoiding that question as one which it would be dangerous to discuss, and which must be left to that simple belief, without knowing and examining the evidence, which is in truth nothing more than a mere prejudice, such as persons might have upon any subject of which they had heard a rumour, but of the nature and truth of which they were wholly ignorant.

If the mind had separate powers, which had permanent existence, in like manner as what we call the powers of sensation and motion in the body; or if any two or more of such powers could act, either in opposition or in concert, at one and the same time, then the mind would to all intents and purposes be a *body*—an organization, or compound of parts, and as such, it must occupy some portion of space, however small, and require some time, however short, for exercising any one of these powers, and also for passing from the exercise of any one of them to that of any other:—it must, in fact, be material; and, like all known material organizations, must be liable to disorganization and death.

But if this were the case, the existence of the mind would be an absurdity, and even an impossibility. To

suppose that one living body, of what substance soever it were composed, could be intimately incorporated with another living body, and act, with it, independent of it, or contrary to it, according to circumstances, is so opposite to, and subversive of, all the notions that we have, or can obtain, of the nature of living bodies, that we cannot for a moment even imagine the possibility of it. Even if possible, it would be useless; for whatever were to be done that a body could do, could be far better done by one than by this extraordinary and impossible compound.

It is true that we speak of *life*, as existing in the bodies of animals, and even in those of vegetables; but we do not consider this life as being itself a body, organized or not organized, or as consisting of matter in any form, or capable of having a separate existence. We can perceive, and examine, and in so far understand, the body of an animal after it has been deprived of life; but we find it altogether impossible even to imagine the existence of the life of an animal deprived of the body. We know that life only as it is displayed in action, by a certain organization, when in a certain state. It comes with the organization, and when the organization is deranged beyond a certain degree, it ceases: but whence it comes, whither it goes, and what it is, we cannot even conjecture. The bodily life of a man, a lion, and a lettuce, is exactly the same—the same blank to our understanding after it is extinct in its possessor, although the display of it—the demonstration of its existence while there—is so very different.

We speak of our being able to use a knife in cutting, as if it were a *power* of the knife, and of the corrosion of metals by an acid, as if it were a *power* of the acid: but we do not consider any of these powers as an existence, which we could separate from the matter of the knife or

the acid, or in any way examine after that was removed. These are mere properties or qualities of the material substance, depending both on the nature and the form or state of that substance, and changing as the state is changed. The knife may be so blunted that we cannot cut with it, or the acid so neutralized by an alkali, another substance which is corrosive when pure, that the mixture of the two shall have no corrosive property; and in both cases, the property or quality which we call the power is gone; though, as matter, the substance remains. It is the same with every quality of every substance with which we are acquainted. They all, with the single exception of gravitation, or weight, admit of being changed; and as gravitation is common to all matter, and remains constant to the same quantity of matter, how much soever all the qualities or properties, and also the state of that quantity, may be altered, it cannot with any correctness of language be called a property or quality of matter at all. It is, in the case of matter, just what the earliest undefined feeling of a pleasurable or painful nature is to the body, or what the feeling of consciousness, or its continuation in personal identity, is to the mind,—the evidence of its simple existence, and nothing more. It tells us that there is matter; and if we take the balance and scales, or any other instrument or contrivance that will answer the same purpose, and by this means institute a comparison between it and any known quantity of matter, we are able to find out how much matter there is; but beyond this we cannot carry our information, without calling in the aid of a new element.

The simplest element which we can call in is space—the space which the quantity of matter fills. If we compare this space with that which is filled with an equal weight or quantity of some other kind of matter, or of the same kind

of matter in a different state, we ascertain what we call the specific gravity of the kind of matter when in the state in which we make the comparison: but still this specific gravity is of so very simple a nature, that, unless we take more elements along with it, we are not able to say of what kind the matter is, or to what use it may be applied. In order to know this, which is the only knowledge of matter which is practically useful to us, because it is the only means by which we can ascertain whether the matter which we wish to apply to any purpose will answer that purpose or not,—in order to ascertain this, we must make ourselves acquainted with the qualities or properties of the particular kind of matter, and of that matter in the particular state.

QUALITY (*qualitas*, "as it goes," or "as it appears,") is expressive of all or any of the properties of things, or of the kinds and degrees of action, by which we know, or can know, each of them individually, and distinguish the one from the other. They are the only subjects which can make any impression on our senses; and by them, and them alone, we judge of sameness, likeness, dissimilarity, and difference, in all the varieties in which they can possibly present themselves as the objects of any one of our senses: but we can, in no one case, imagine any one quality to have a separate existence, but only as belonging to some body, or portion of matter, as its subject or substance.

SUBSTANCE is literally that which "stands under;" and, taken in its original sense, it has nearly the same meaning as *matter*—"that of which all things are made, or consist," without any regard to the qualities which distinguish particular things, and which qualities are, in any particular case, that which the substance "stands under," or supports. But we cannot even imagine any substance without being possessed of weight, and occupying some portion of

space. How much weight any substance may have, and how much space it may occupy, are points which belong to the particular case, and must be ascertained by the operations of weighing and measuring; but whether we can do this by any of the ordinary methods in employ, depends on the nature of the case. We cannot, however, even think of substance or matter without involving the idea that it has some weight and some measure.

SUBJECT means that which is "brought under;" and thus it always involves the idea of some other thing or being which has so placed it. It has a far more extensive meaning than "substance;" for every existence, every quality, every action, every possible consideration respecting which thought can be occupied, is the subject of that thought; indeed, that which has no existence, or of which the existence is impossible, can be a subject of thought, as well as that which is palpable to any or to all of the senses.

The word "substance," and yet more frequently the word "matter," is also used in a figurative sense. Thus, when we speak of the substance or matter of a book, or a discourse, we do not mean the subject of it, but the extent to which that subject is treated of or explained. But in the figurative use of these terms, the word "matter" much more nearly agrees with the word "subject" than the word "substance." When we say "What is the *matter?*" we take it for granted that some subject is producing an emotion in those to whom we address the question; and when we ask "what is the *matter* with him?" we take for granted that he is, for the time, *subject* or subjected to some uneasiness. In both cases, and in every case of such use of the word "matter," we take for granted that there is a *subject*, and the object of our inquiry is to know its nature. But we cannot in any such case use the word

"substance" instead of the word "matter;" for there may be a great deal the matter without the least allusion to any substance whatever—as for instance, some are in the habit of saying that there is "much ado about nothing," which means that there is much the matter about nothing; and yet "nothing" is the negative, not only of the "substance," but of all that can be the subject of thought. The word "matter," in every sense in which we can use it, always retains some trace of its radical meaning — that of maternity or producing, and this in the case of mental subjects or ideas, as well as in that of subjects which are external of the mind.

The words "internal" and "external," as applied to the mind, are figurative; and we must be careful not to be misled by them. In respect of locality, there can be nothing either external or internal, because the mind occupies no extension in space, and, therefore, can have no locality. Whithersoever the idea with which the mind is occupied at the time has its object situated, thither the mind is transported for the time in all that we can know about it; and be the distance as great as it may, there is no time and no effort required for passing over it. Its range is exactly commensurate with its knowledge: whenever it has present knowledge, either internally, from the stores of its own experience, or externally, through the medium of the body, there it is present for the time of the thought, and the considerations of time, as estimated by the succession of events in material nature, and of distance, as measured by lines, are quite indifferent to it. The thought may be retrospective of the past, prospective of the future, or simply of the passing instant; for we are equally present and accessible to the mind in its thoughts. The only barrier of duration or succession which it cannot reach is

that of eternity. So also in space, infinitude is the only bourne which the mind of man is incapable of reaching: thus in the case of extent, as well as in that of duration, this mysterious boundary, which the thought of man can never reach, may be continually approached, until the succession or the extent becomes perfectly indefinite, and the number of it in any known measures cannot be named. It is the same with the opposite limit, both in time and in space. We cannot by the senses, or by means of any instrument that can be applied in aid of the senses, arrive at the infinitely small, either in duration or in extent, although, as in the former case, we can approach it indefinitely.

The reason why these boundaries are set to our understanding, is the impossibility of instituting any comparison, by which a relation can be discovered between eternity or infinitude and any experience of ours. We know the name, and we can paraphrase it by saying, that eternity has no end—infinitude no boundary; but then, after we have said thus much, we are nothing the wiser than we were before; for the simple names convey to us as much information, or rather show us as clearly that we can really know nothing upon these subjects, as the most lengthened and elaborate combinations of words to which we can have recourse.

When we have said of eternity, that it means succession in time reaching beyond the limits to which human knowledge can by possibility reach, we have expressed the complete negative; and this is all that we can do; and the case of infinitude of extent is exactly the same. We may expatiate *about* either, by particular negatives, telling what it is not like; and by these expatiations we may make the idea of more easy and frequent suggestion; but we only increase the familiarity with the word, not our knowledge of the subject; and the probability is, that as we multiply

words we multiply errors,—the reason of which will appear afterwards.

Within these incomprehensible limits, the mind may have any degree of knowledge, provided it has the means, for it always has the capacity; and thus, in alluding to one mind as differing from another, we do not speak of the minds as abstract beings, or as differing in their nature or essence, but only in their degrees of knowledge, and their capacities of acquiring knowledge, or turning it to account, all of which are improvable by practice.

It is only as that which knows and thinks, that we can have any conception of mind; and as no knowledge or thought can be a reality, that is, can have an existence separate from the mind that knows, our knowledge, whether of the realities of the external world, of which we obtain information by direct impressions on the senses, or of those new combinations which the mind can form for itself, though without adding one single original element, the possession which the mind holds is *its own*, in a most emphatic sense of the words; and no power, no contingency, and no event of the external world, or of any one subject whatever that can affect the body, or engage the thoughts, can, to the smallest extent, spoil the mind of its knowledge. It is in this sense that we say "a man's mind is his kingdom;" and it is a kingdom which cannot be invaded by the combined powers of all the monarchs upon earth.

It is true that, as the external world, both in its materials as coexistent, and in the succession of its events, makes constant impressions upon the senses, and through the medium of these reaches and influences both the intellectual states of the mind and its emotions; and as the only way that the mind can go on in the progress of thought is by thought calling up thought by means of some resem-

blance as relative between them, the whole of our trains of thinking and the characters of our minds—that is, of our thoughts (for we know no other characters of them), are modelled by the persons and the things with which we are familiar. Thus far, the case cannot be otherwise. No part of our knowledge can be of ourselves originally, for even the simplest point at all—that of the existence of mind—is a feeling, and not a fact which we can establish, except by evidence from without; and as this evidence depends wholly upon that which we have known, it follows by necessary consequence, that our knowledge even of this first and most elementary matter must be exactly what our experience makes it; and if so in the very first almost, it must be so in all that follows.

But, though the nature of our minds — that is, of our mental occupations, or our knowledge and our feelings — thus depends upon the circumstances in which we are placed, the persons with whom we associate, and the events which happen to us, whether we regard them as originating more in the general course of things around us, in those of our immediate associates among mankind, or in ourselves personally; yet the knowledge, when we have once obtained it, is equally our kingdom — that of which we cannot by possibility be deprived, whether it is pleasurable or painful to us, whether it is as of good or as of evil, and in what degree soever it may be either the one or the other.

In this lie the strong and immoveable foundations of all our more powerful emotions, whatever may be their nature, as encouragement from the past, joy in the present, and cheering hope of the future, on the one hand; and remorse from the past, anguish in the present, and the dread of the future, on the other hand. It is in the certainty that these, being once arrived at through the medium of experience,

will not quit and cannot be expelled, that we become so truly the authors of our own happiness or misery; and that this happiness or misery is not a portion to us for life only, but a portion which cannot be taken away, and which we ourselves are utterly incapable of alienating, until, by the final destruction of annihilation, or turning into nothing, mind and the memory of thought perish together, finally and without return.

As the mind can be in only one state—that is, occupied by one thought at a time—and as it has no absolute control over the succession of its thoughts, any more than it has of actually producing or originating their elements, it is obvious that one train of thought may prevent the recurrence of other trains, to such an extent as that, for any number of days or years, any portion of the experience of the past may remain dormant, so that, during the time of its dormancy, it may be to the perception of the mind as though it had never been. But, notwithstanding this, it is not, and it cannot be, utterly lost; for, be the lapse of time, and the variation of the trains of thought during that time, ever so great, if any sensation from without, or any feeling within has sufficient force of resemblance, shall arise, then the former one, how long soever it may have lain in mental oblivion, comes forward in all its freshness and force, just as if it had been in daily remembrance, and indeed more so, as it wears no small portion of the charm of novelty. For instance, if we accidentally meet an old friend, who was intimate and dear to us, our joy and emotion are much greater than when we meet with one whom we are in the habit of seeing every day, even though the new friend is essential to our best interests, and the old one is not in any way connected with those interests. The exploits of our childhood may, in the bustle of life's activity, be quite for-

gotten by us; but if we pass the scene where we have sported in our early years, the sight of that scene makes us again young and sportive, and will not let the mind go until we have fully known and enjoyed it.

This utter impossibility of the mind's being, by any known means, deprived of any knowledge that it ever had, of any experience that ever made an impression upon it, is in itself a full demonstration of the immortality of the mind; and, though it might, at first and hasty consideration of the subject, be but little expected, the experience of the body is embalmed in this immortality of the mind.

Farther than the simple feeling of pleasure or of pain, the body of itself knows, and can know, nothing of its own existence, its own form or dimensions, or any thing else. All beyond this is of the mind, and being so, it can no more be destroyed or lost than the mind itself. It comes under the very same character, denomination, and laws, as every other kind of mental knowledge, and partakes of its durability of character to the full extent. It has been formerly noticed that, in the case of the amputation of a limb, the memory of that limb, and even of the pain which accompanied or preceded the operation of the surgeon upon it, is not lost, for it not only returns at times in mental feeling, but it is actually transferred to the situation of the limb; and the remembrance of the pain, or the other strong sensation of which it was the seat when connected with the rest of the body, actually brings it back to its locality, as if it were part of the body still.

The time which may have elapsed makes no difference in this case, nor does the change of the absolute matter of which the body is composed; for that matter may be changed fifty times, so completely as that not one material particle of the body may remain after each change, and yet, except in

the case of some very singular diseases, which disturb and derange the connexion between the body and the mind, the feeling of the perfect and continued identity of the body is not less perfect than that of the identity of the mind itself.

Now, if this be the case,— and that it must be the case follows by necessary and inevitable consequence from the only rational conception which we can have of mind,—the primary notion of it upon which all else is founded, without which it could be no mind, and as its phenomena do not admit of our regarding it as material, without a palpable absurdity, mind could not exist. But our own feelings will not allow us to deny the existence of mind, though we may *say* that we do so, either to conceal our ignorance or for some other purpose ; and these, for all that we know of the body, must remain a mental knowledge, ready to arise when any new state has so much resemblance to any of the impressions which we received through the medium of the body as that the one can suggest the other.

The mere matter of the body cannot possibly know any thing ; and besides this, it is continually changing, so that the body is not the same identical portion of matter even for the two days, or moments, which follow closely upon each other ; but if the matter of the body cannot know, much less can the organization, which is only the form of matter. The mind, however, not only does know, but cannot help knowing, all that happens to the body, of which the proper impression can be conveyed.

Of what may be called the proper functions of mere animal life in the body, there is no information whatever conveyed to the mind ; for, in respect of these, the system of the body goes on in exactly the same manner as it does in those animals which have no mind, and in such animals the instincts have no more to do with the purely animal

functions than mind has to do with the same functions in man. Of the organization, the dimension, or the size and character of the body, the body of itself gives to the mind no information whatsoever. As little does it give any notice of the accession of matter by which the full size is attained, or of the matter assimilated and applied to the renovation of the body after the waste occasioned by its use. The air in respiration answers so many purposes, that of voice among others, that there is some information as to the fact of its going on, communicated to the mind; but the circulation of the blood, the various workings of the organs of motion, and even the parts which are primarily affected, and influence the others in sensation and in motion, and in all that the body (as animal) does, are matters which the body does not directly and of itself communicate to the mind. That these bodily functions are going on well or ill—that they are healthy or diseased —are indeed subjects upon which there is a sort of communication by the body to the mind; but this is so shadowy and indefinite that it does not of itself afford the slightest information of the nature of the disease, or of the part of the body which is affected by it. So far, indeed, is the body of the patient from being able to inform the mind of what is the matter with it, that the ascertaining of the fact very often baffles the skill of those professional men who are most intimately acquainted with the structure of the body; and those who have had the most experience in the practice of the healing art, are left completely in the dark, and obliged to proceed, in the application of their remedial means, by experiment more than upon experience, unless there is some topical derangement which is palpable to the senses, and with which they can deal upon the ordinary principles which apply to the whole of material nature;

and, in all such cases, the disease, though not the means of its removal, is as well known to the patient as to the professional man. This knowledge of it, which is common to them both, is all that can with propriety be called the mental knowledge of the disease; and the additional knowledge, in which the physician cannot partake, is the pain or uneasiness which belongs to that shadowy sort of communication to which allusion has been made, and which, though it may be very acute feeling, does not amount to knowledge.

This furnishes a natural argument for the immateriality and immortality of the mind, which, though rarely brought forward, is yet both strong and striking. The mind obtains its knowledge of the body, not by any intuition, or secret communication between the two, but exactly by the same means as it acquires the knowledge of any other portion of the external world; and the senses of the body, and their organs, are merely instruments to the mind in the one case, as they are in the others. The mind is thus an observer, or, rather, a student of the body, which necessarily implies a separate existence; and as we cannot even imagine a case so very impossible as that of two material existences occupying one and the same portion of space, and the one capable of acquiring a knowledge of the other, without any reciprocal knowledge on the part of that other, the doctrine of the immateriality and consequent immortality of the mind becomes a necessary and unavoidable deduction from the nature of the relation between the body and the mind, and without any further argument upon the subject. Thus, every step which we take in the study of the mind, if we take it without prejudice from what we feel and observe, tends further and further to strengthen the assurance of immortality, and to prove how perfectly the doctrines of

Revelation, and the results of unbiassed and honest philosophy, agree with each other.

But all the real knowledge which the mind has of the body, partakes of that enduring and immortal character, which belongs to the mind itself, and to all the knowledge in which the evidence of the existence of mind consists. The very expression which we use, when any portion of knowledge of which we were once in possession does not arise to the mind in suggestion, implies that that knowledge still exists, though we are unable to find it at the time. We have *forgotten* it; that is, we have "gotten before" it, and left it "behind," while we have been occupied with other matters. "It is still to the *fore*," is an expression in use in many parts of Britain, as an answer to inquiry after any thing formerly known, which is not presently seen: and this *fore* is the temporary oblivion of a thought or idea, when we say it is "forgotten."

Long absence, and great changes of occupation, and consequently of the trains of thought, make us forget those scenes and persons that we were at one time most familiar with: but a very slight resemblance in any present occurrence or train of thinking brings them back again in exactly the same characters as they had when we were familiar with them; and the scene, to the minutest leaf or flower, *which was noticed at the time*—the day, to the most transitory speck of cloud—and our companion, in every lineament of his person and every article of his dress,—all stand as clearly before the mind as if they were present realities. The changes that they may have undergone in the interim make no difference to this returning knowledge of them. The man may be old, bent over a staff, a cripple, blind and deaf, or in his grave; but the boy with whom we sported on the flowery bank comes back to our mental perception in the immortality of youth.

Now, if this be true,—and every one who has thought—as who has not?—must feel that it is true,—in any case of external nature, and of the bodies of others, must it not be equally true in the case of our own bodies? There is nothing upon which we can ground the slightest difference, and therefore there can be none. All the knowledge which the mind ever has acquired of or concerning the body, must be as immortal in duration as the mind itself; and when the relation between any portion of it and a present state of the mind is such as to call it up in suggestion, it must return, after the lapse of countless ages, with as much of truth and certainty as after the lapse of a few days or hours.

In this there is involved the doctrine of the RESURRECTION of the body—one which is often regarded as the most difficult relating to man, of all that are declared to us in the volume of inspiration; but which, when we consider it aright, is a natural and even a necessary doctrine. In one place it is declared, that "It is sown in corruption, it is raised in incorruption. It is sown a natural body, it is raised a spiritual body;" and in another place it is declared, that "With the same bodies they shall arise; with the self-same bodies shall they come;" and it has been supposed that these two declarations are contradictory of each other. But, in truth, they perfectly harmonize with each other, and with the conclusions to which we are brought by the investigations of philosophy, when we conduct those investigations in the honest desire of arriving at the truth, and carry them to the proper extent.

The cause of the doubt, the perplexity, and the error, in which many of those who seek the truth, but are somewhat feeble-minded and irresolute in the search of it, seems to be that they hesitate, and dwell upon the difficulty—remain in the slough, when only one step more would place them on the firm ground beyond it.

The *sameness* of the body does not mean that it shall be composed of the same identical particles of matter, or that it shall have the same dimensions and aspect, or even the same parts. There is not one of these which is permanent, even in the present life; and therefore, if we were to suppose the resurrection of the body to take place in perfect sameness of matter or of form, there would arise a most indeterminate problem as to *which* body it should be; for a man who lives out the ordinary period of human life may have thousands or even millions of changes of the body in this respect; and as there is no reason why any one of them should be the body of resurrection rather than any other, they would all have equal claims, and each individual human being would rise from the tomb with as many different bodies as would form a nation. It cannot, therefore, be understood or even suspected that there will be any literal rising of the specific and identical *matter* of the body from the tomb; and consequently, were it not for the beneficial effects which they have, or are supposed to have, upon the feelings and minds of the living, all the rites which are paid to the dead, and all the consecrations and other acts of reverence which are bestowed upon the places of sepulture, would obey the law of their nature, and fall wholly within the category of unmeaning superstitions—to which they in fact belong. If the priest is with any shadow of meaning to consecrate the regesta of the last effort of life in the body, or the place where that is deposited, there would be equal propriety in his performing the same office upon all the regesta of life, and the places of their deposit, whatever and wherever these might happen to be.

But the information which the mind receives concerning the body is of a far more durable nature; and is always

ready to obey the call of a present thought, if the relation is such as to suggest it. That the mind may return to the knowledge of the body while that is mouldering in the dust, and may feel pleasure or anguish in so returning, is highly probable, though we cannot have experimental knowledge of it. It is quite evident, however, that there is no impossibility in the whole conduct of the body and mind while they are together upon earth, returning to the mind when in a separate state. The memory of a person, a scene, or an event, often comes back to us we know not how,—certainly when we are not aware of any external object, or of any train of thought by which it is suggested. That there must be such a train of thought is certain,—only we are not conscious of it, which makes us have exactly the same feeling of it as if it had never existed. We are in the habit of saying that this remembrance, of the cause of which we are unconscious, arises "when we are not thinking of it;" but this, like very many of our expressions relative to the mind, is incorrect. We must have thought of it, that is, we must have had a train of thought which suggested it, —"brought it to mind," as we say, only we were not conscious of that part of the train.

Our worldly pursuits, in most instances, so completely occupy us, that we do not attend to the progress and succession of our thoughts. Any one may be convinced of this by glancing back at past life, or of any portion of it. If we keep no diary of our conduct, it is no very easy matter for us to say what we were *doing* on any day according to the calendar; and it is still more difficult for us to call to mind what we were *thinking*. So difficult, indeed, is the latter, that perhaps no one can, at the moment, and without employing a train of thinking, name a single thought for one day out of every thousand, though we must

have been thinking without interruption during the whole time.

Our memory of actions is much more ready, though the memory of these is lost, and can never be recalled, unless connected with thought in some way or other. We *may* always act with thought, and we always should, but we very often do not; and then, if the action is of such a nature as to produce no emotion, it passes entirely away. In these cases we are said to act thoughtlessly; but if the action is such as to produce a strong emotion, more especially an unpleasant or painful one, this is connected with thought, and the memory of it remains, and the anguish which it inflicts upon us affects us much more deeply than any thing that can be remembered of a pleasurable nature.

Thus, even in the present life, we live much more in the miseries of the past than in its enjoyments; and our hope and happiness are directed to the future. This seems the very constitution of our nature, the good which urges us on in the career of life, and the real cause of all the improvements which have been made in society. The whole of our life is spent in efforts to escape from pain or uneasiness of some kind or other— bodily or mental, real or imaginary; and when, according to the judgment of others, we ought to be contented and happy, our minds are on the rack for new miseries, our efforts to overcome which *are to be* sources of happiness to us. But with whatever fondness of anticipation we cherish them, they meet us with disappointment,— they do not *quite* satisfy us; and when they are past they turn upon us,—they become whips to scourge us on to new exertions.

But though this is the constitution of our nature, we must not suppose that a harsher measure has been dealt to us than to the animals, which lie down in perfect ease

and quietude as soon as they are fed and their other animal appetites are gratified. On the contrary, we cannot too much admire the wisdom, or be grateful enough for the goodness, which has thus laid the surest foundation for our improvement and enjoyment jointly. Our animal wants do not differ in kind from those of the other animals; and in the gratification of them there is no real enjoyment —there is merely the staying of the physical pain occasioned by the cravings of the appetite; and, when all such cravings are satisfied, the human animal, like all other animals, has no tendency but to sink down into perfect inactivity and sleep, until it shall be aroused by the fresh cravings of an appetite. But the mind needs no repose, it slumbers not; and when it has once drunk deeply enough of the streams of knowledge and thought, it will not allow the body to rest satisfied with its merely sensual gratifications, but is constantly jogging it to be up and doing something for the intellectual gratification of the man; and simple as this may appear, it has been the origin, and is the grand cause of the improvement of all the sciences and all the arts. As long as the savage continues to be *contented* to dig fern roots and gather shelled mollusca for his food, he never thinks of having so much as a club or a spear; and the indolent among civilized nations, whatever may be their possessions or their wealth, are very nearly in the same predicament. How many thousands of those who, according to all our ordinary estimates, have both the opportunities and the means of doing great things, leave the world without any memorial save that which their surviving friends, generally in gratitude for what the deceased cannot take with them to the grave, happen to carve upon the monument, as if in mockery of them whose names it professes to perpetuate?

But, even in the most abject state of human nature, that in which the mind has the least influence upon the conduct of the body, and where remorse for the past and hope in the future have scarcely any place,—even in these, there are outbreaks of passion, so totally different from any thing which takes place among the mindless animals, that the existence of mind is proved even in the very depths of its degradation. These outbreaks, in which the body appears to hold the mind in powerful captivity, do not indicate a disposition which is trained to systematic vice,—for there is mind in vice, though sadly prostituted and misapplied: they indicate a want of self-government; and whether the result is mere raging, injury to others, or self-injury carried even to the length of suicide, they are raving madness at the time; and if repeated they settle into confirmed mania, and the peace and safety of society require that these unhappy persons — unhappy from the intellectual and moral neglect of their minds — should be expelled or shut up as unworthy of it. Females are much more subject to these rabid outbreaks than males; and they are most subject to them at those times when, from physiological causes, the animal system predominates. They are intimately connected with hysteria, and although they do not arise from forethought malevolence, and thus are not properly crimes within the statute — no statute will restrain them — they are far more disagreeable and dangerous to the peace of society, as they can neither be anticipated nor restrained. If we could trace human characters and habits to their causes, it would probably be found that much of the misery and not a little of the crime by which even the most civilized nations are deformed, are really occasioned by those outbreaks of passion, against which no laws can afford security.

Yet, even these most melancholy displays of human na-

ture—and they are far more melancholy or at least degrading than that madness which is produced by disease — are, strange as it may seem, proofs of the existence of mind. Animals have their fits of passion; but in them, those fits, even when they are most violent, are always according to the instincts of the animal and not in opposition to them. They are always directed to the protection of the animal, and not to its injury, though injury may sometimes be the result, as when animals kill their own species, or those which do not constitute their food. But the battle is in all cases a battle for safety or protection of some kind or other; and no animal either commits suicide, or kills another out of mere passion. They often do contend to the death, but they never depart from the instinct.

But those outbreaks of human passion to which we allude, and which are not confined to rage, though that is the most frequent and most disgusting, are in violation of every thing that can be regarded even as an instinct. Those who are the most habitually endeared to us, and for whom we would in the ordinary tenor of our lives make any sacrifice of our personal comfort, are not spared more than others, or rather they are the first and chief objects upon which the fury of the passion discharges itself. Articles which are most essential to our comfort, of which we usually take great care, and which we have no possible means of replacing, are shivered to atoms or cast in the fire; and, to use a personification where no figure of speech can add to the sad horror of the truth, the demon of fury rides us headlong to our own ruin, and to that of all which in our calmer moments we hold dear.

This, it must be admitted, is a fearful picture of human nature; but unfortunately for many it is a true one, and one of which the revolting nature of the truth cannot be

heightened by any power of language. It shows us what we should all be if the mental and moral restraint, the dread of the consequences, as it is reflected upon us from the memory of the past, were taken off; and also, how necessary it is to have the mind so disciplined, as to be always ready to save us from these unseemly and debasing exhibitions.

This is the more necessary, that such exhibitions have not the same warning in them as crimes which are committed with intention. Even in the case of crimes, there is danger that the repetition may stifle the compunctions which the commission of a criminal action is calculated to produce in the earliest instance; and they who follow crime as a trade very generally enlist the young as their assistants in it, before they are of such an age as that they can clearly distinguish between good and evil; and thus they run their career with comparatively little feeling of remorse, compared with what is experienced, at the outset, by those who fall into criminal courses after they are able to know good from evil, by judging of the consequences.

But persons who are subject to those furious outbreaks of passion to which we are alluding, have even less compunction than children who are thus early trained to crime; for, before there can be capacity for the commission of any crime, or the performance of any act of calm deliberation—and the crimes to which the young are trained are always of this character, as they are crimes of cunning—there must be a perfect mental possession, or vigilance and activity, so far as the performance of the evil deed goes; and children that are more than usually acute for their years are selected for these purposes. But in the fury of the passion, the mind is in abeyance, or in captivity, as has been said—the patient is "beside himself;" there is no

consciousness of what goes on at the time, and thus there can be no remorse after it is over.

The consequences are not, however, the less serious upon this account; for, on the contrary, they are the more so. Our remorses may be painful to us, but the pain is of a healing nature. The agonies arising from the past are our clearest warnings and surest guides in the future; and we may amend our ways from attending to them, when all outward admonitions, which come as precepts without experience, fail in producing any effect upon us.

The practical applications of the remarks which have just been made upon the painful but wholesome remorses which arise in suggestion from past actions of which we are conscious, and also of the baneful influence of outbreaks of violent passion of any kind, are very numerous, and of great importance both as regards our success and pleasurable enjoyments of life, and as regards our state when the present life is over. But we have no room for entering into the details of them, neither is this exactly the place for doing so even if we had.

The necessity of giving the mind full exercise in preparation for all that we do, in order to the right performance of the individual act, and especially with regard to the subsequent return of it to the memory, may, however, be understood and appreciated from the few remarks that have been offered. All knowledge or experience which the mind receives, at what time and in what manner soever, is treasured up not only for the whole of our time upon earth, but for an eternity of duration; and according as our recollections may be,—and they are in all cases true to the facts,—it will be well or ill with us for ever. It has been remarked that our remorses from the past are, in all cases, stronger and of more ready suggestion than our pleasur-

able recollections. This is wisely and kindly done, as it tends to make us use our experience as the means of keeping us in the right path: but if we neglect the warning voice which thus comes from the past, we may go on adding remorse to remorse, till the burden is heavier than can be borne, or even described.

It is true that the body may escape by death, and death by our own act, in the cases of extreme anguish. But, though this may prevent the accumulation of further mental agony, as arising from the improper gratification of the senses of the body — the fertile sources of all our mental agony, it takes off none of the burden which is already on the mind; and not only this, but, as the act of self-destruction is the most unnatural act which we can by possibility commit, the weight of it is added to the burden; and probably, nay, certainly, the anguish to the mind of the suicide from his last fearful act must be far more intense and intolerable than any remorse which the foulest murderer can feel in the present life—even when it comes to the extreme case, and compels him to render himself up to the offended laws of his country.

Even his doing so does not take away the smallest portion of the mental anguish; for the sting which a crime or an error inflicts on the mind cannot be eradicated, and the more we labour in the attempt, the more deeply it pierces, and the part rankles with the keener grief. The expressions of "the undying worm," and "the unquenchable fire," which are used to shadow forth this mental torment when it is beyond the expression of ordinary language, are very appropriate, and though figurative, by no means too strong.

New scenes and fresh applications of the body, and varied gratifications of the senses, together with delusive hope in

the future, which even evil-doers have to sustain and encourage them in their iniquity, may take off the edge of this mental agony, while the body is vigorous, and its varied appetites are on the alert for their gratification. But when these begin to be blunted, and the frailties and pains of age creep on, the intervals of bodily suffering are rendered more intolerable than the pangs themselves, by the direful remorses which shoot across the mind.

Yet in men in the extreme of decrepitude, if the connexion between body and mind is not utterly shaken, there is some lingering hope, how futile soever it may be, and while life remains in any degree which can be considered as life, the measure of misery to the sufferer is not entirely felt. In the very article of death, indeed, when the powers of the body have sunk so low as that it can give no definite expression of what is the matter with it, there are often dumb signs of the most direful agony. These are seen upon many occasions, but they have never, perhaps, have described with so much force and truth as in the account (though that account is *imagined*, and *not true*) of the death of Cardinal Beaufort, in the third act of the second part of Shakspeare's Tragedy of Henry VI. The entire passage is too long for quotation, but we cannot resist the giving of a few short extracts, to show the matchless power of the Great Bard of Nature, above the mere inditers of systems of mental philosophy — even the best of them :—

> " *Vaux.* Cardinal Beaufort is at the point of death:
> For suddenly a grievous sickness took him,
> That makes him gasp, and stare, and catch the air,
> Blaspheming God, and cursing men on earth.
> Sometime, he talks as if Duke Humphrey's ghost
> Were at his side; sometime, he calls the king,
> And whispers to his pillow, as to him,
> The secrets of his overcharged soul."

This is a delineation of mental agony, to which there is perhaps no parallel in the English language, or in any other; but hear the Cardinal himself, when the king and his attendants went into his bed-chamber:—

"Bring me unto my trial when you will.
Died he not in his bed? Where should he die?
Can I make men live, whe'r they will or no?—
O! torture me no more, I will confess.—
Alive again? then show me where he is;
I 'd give a thousand pound to look upon him.—
He hath no eyes, the dust hath blinded them.—
Comb down his hair: look! look! it stands upright,
Like lime-twigs set to catch my winged soul!—
Give me some drink; and bid the apothecary
Bring the strong poison that I bought of him."

The substance of volumes is embodied in this very short and imagined delineation of the workings of remorse in the guilty mind, when the body is upon its death-bed. But perhaps it is even more forcibly brought out by the words put into the mouth of the weak and gentle Henry:—

"O thou eternal Mover of the heavens,
Look with a gentle eye upon this wretch!
O, beat away the busy meddling fiend,
That lays strong siege upon this wretch's soul,
And from his bosom purge this black despair!
War. See how the pangs of death do make him grin!
Sal. Disturb him not, let him pass peaceably.
Henry. Peace to his soul, if God's good pleasure be!
Lord card'nal, if thou think'st on heaven's bliss,
Hold up thy hand, make signal of thy hope.—
He dies, and makes no sign; O God, forgive him!"

This is a picture of the anguish of despair, in the death scene of a self-condemned bad man, which probably none but Shakspeare could have delineated,— at least there is

no other who has made the attempt; but even this stops short of the sad catastrophe in which the doom of the wretched sufferer is sealed. Even up to the very last moment — until that fearful instant at which "he dies, and makes no sign," there is still some lingering remain of hope in the world; and it is only when the last indistinct feeling of life in the body ceases—a feeling which probably resembles the first that is experienced upon our coming into life, that the mind is thrown completely upon itself, and left to the full torment of utter and indescribable despair.

Of the state of the mind *then*, we can form no perfect idea, because there is nothing in our experience that we can use as a means of comparison. But from what we do know by experience in the present life, our happiness is in the future—in the happier event, or simply in the novelty and change which that may bring. But the future belongs to time only. Eternity has no future; and the separated mind is launched upon that, as upon a dark and shoreless ocean, unless the beams of hope in God light it up. The world and all its enjoyments are gone for ever. No plan can be formed, and there are no materials, neither is there any hand to execute. What new knowledge the disembodied mind may be capable of receiving, we cannot tell; but it can receive no more of that kind of knowledge which it acquires when the body is in life; and as little can it lose any one portion of the knowledge which it has thus acquired, how bitter soever the remembrance may be.

The knowledge of God is the only species of knowledge that can give hope after the death of the body; and if we possess not this, we are thrown wholly upon the remembrances of the past life. In these, however, there is no future and no hope, even though that life has been spent

with the strictest moral propriety, and every wish and every effort to do well. There must be degrees in the torment, no doubt; and remorse must be grievous in proportion as the life has been wicked. But still, these are only differences; and that which forms the real — the incurable and unmitigated anguish of the whole state, is common to the morally good as well as the morally bad.

Morality, how pure soever it may be, belongs entirely to the present life, and when the body is dead all morality is at an end. While we are in the body we may buoy ourselves up with it as we do with many other false hopes; but, from its very nature, it cannot shed a single ray of light beyond the grave. There is no immortal hope but hope in Him who is immortal: and, without this, eternity is as utter despair to one man as to another,— the only difference being in the degree of anguish — for the despair is total in every case; and, if we have no hope in God, our eternal state must be miserable; and that not by any direct infliction, as one man inflicts punishment upon another, or brings it upon himself by his own act, but from the very nature of the case. It is not, and it cannot be otherwise.

This, it must be admitted, is an alarming case; but it is a case to which we must all come, and the severity of which we must abide alone and unpitied, for ever and ever; and, therefore, we ought to know it, and be prepared for it in that only way which God, of his infinite goodness, has prepared and revealed. If mental philosophy had no other result than this, it would amply repay the small portion of labour which we need to spend in the study of it; and if mankind were more generally instructed in this species of philosophy, there would be far more real religion in the world,—whatever there might be of the form without the

knowledge and the power, with which but too many of us rest satisfied.

Of the happiness which the immortal hope inspires, it is not our province to speak, as we are concerned with the state of the mind only; and what that state must be after death, naturally and without religion, is a portion of its legitimate history. What new information it may be capable of receiving, through the inspiring influence of the knowledge of God, we cannot tell; but that is the only source to which we now look; and as the enjoyment of the mind consists in knowledge only, we know that, without this, eternity must be one unbroken succession of misery—and misery for the delineation of which we have no similitudes, even in the severest of our afflictions while in the present life.

The resurrection of the body is a doctrine which we cannot explain, or understand, any farther than that shadowy view of it which is given in the volume of inspiration; but, whatever the new body may be, and at what time and in what manner soever it may be appointed for us, we know, from the nature of the mind, that the mind must meet it with all the recollections of the present body; and that, therefore, be its nature and form what they may, our mental feeling,—the only one which is permanent, must be that it is the same.

SECTION X.

SUGGESTION.

NOTWITHSTANDING the countless variety of works of which mind has been the inventer, the constantly changing moods of the mind in every human being, and the fact that, among all the millions of human beings that have lived, are now living, or shall hereafter live, there have not been, are not, and cannot be, two minds exactly alike — even in one single demonstration of them that can be perceived or named;—notwithstanding this, it is astonishing how very simple the principles of mental philosophy are, when we take them in their most general form, and cleared of all the modifications which are produced by circumstances.

Of the simple mental states, in which there is no emotion, only two forms can be described; and even in those two, the difference is in the subject of the thought rather than in the operation of that which thinks. Names have, however, been given to the modifications, while the modifying causes have been overlooked; and thus the doctrine of the mind, naturally one of the most simple of all doctrines, has been rendered a complete chaos,— a wilderness of words, in which no track or trace of reason or understanding can be found.

Much of this confusion has arisen from that proneness

to personification, which is always, and upon all subjects, the concomitant of ignorance. The neglected child beats its toy, the mindless rustic kicks the stone against which he incautiously dashes his foot, and nations just beginning to awaken into thought, people the heavens, the earth, the air, and the sea, with divinities, till there are as many gods in their mythology as there are classes of phenomena within the scope of their observation and thought. It is, in short, idolatry all over, and whether there is or is not any idol palpable to sense, is a matter of small moment; for the mental feeling and belief are the same, whether the god is made of wood, or stone, or other matter, or whether it remains simply in thought. In proportion as the subject is in itself dark and mysterious, is the proneness to the idolatry; and, consequently, the wonder would have been in the philosophy of the mind escaping the contamination, if such had been the fact. Therefore, we shall not notice these personifications, except in some of the cases where there is the greatest danger of our being misled by them.

We know the mind only as it is capable of knowing and thinking; and as the character of each individual thought is produced by its subject, and not by the thinking mind, the field of our investigation is brought within very narrow limits. Different minds, no doubt, think very differently upon the same subject—some correctly, some falsely, some profoundly, and some slightly; but still, whatever the thought may be, it is produced and modified by the subject; and thoughts vary with their subjects, or, which is the same, with the perceptions which the thinkers have of these subjects. Consequently, we may omit every difference, and consider thought generally, simply, and as equally applicable to every subject.

Now, as thought must originate in observation, however

much the mind may modify it afterwards, the first and general modes of thought must answer to those of observation: and "what I think" must be conducted upon the same principles as "what I observe."

The word THING is perhaps the most convenient general name that we can use for all subjects of thought, just as IDEA is the most convenient one for all thoughts themselves; and the one word may be so used, as well as the other, without any violation of its proper meaning. *Thing* is really the same word as *think*, only "think" is the act of the mind, and "thing" is the object of that act. *Nothing*, the negative of thing, is *no think*— no subject for thought, and by necessary consequence, no thought at all. As there is scarcely any limit to the range of thought, so the meaning of the word "thing" is equally varied and extensive. It may be that which exists, that which happens, that which is imagined, that which is impossible,—*any thing*, in short, but NOT *nothing*; for "I am thinking of nothing," means that "I am not thinking at all." Figuratively, we may apply it to a relation, though literally a relation is not a thing, but the result of the comparison of one thing with another, Thus, *two* and *four* are things, that is, we can apply them to all things whatsoever; but the fact of "four" being "twice two" is not a thing,—it is a relation, ascertainable by examining the things.

The distinction here is rather an important one, because all the errors which have been committed in this, the foundation, and growing up with the structure of mental philosophy, and vitiating the whole of it, are chiefly mistakes in the meanings and applications of words. Therefore, it may not be unimportant to take another view of it. A thing and an idea, the one as the subject of thought, and the other as the thought itself, not necessarily attended

with the presence of its object, bear a close resemblance to a *thing* and a *fact*. *Res*, a thing, and *factum*, a making, both relate to the same kind of operation, only the thing is that which is made, and the fact is the process of making. A thing may be the subject of simple and immediate perception; and if there were only one thing in existence, that thing might be known. But a fact is founded in relations, and if there were only one thing in existence, and that thing always in the same state, there could be no facts. That any thing possesses any quality, whatever it may be, is a fact,—as for instance, it is a fact that snow as it falls from the clouds is white and cold; but the mere mention of this fact implies knowledge of other things that are not white and cold, or not so white and so cold as snow, and this knowledge can be had only by comparison: and it may be heightened by contrast: snow close by the shore of a dark sea, or a deep lake,—and water shows unusually dark in such circumstances,—appears more intensely white than when it covers the whole horizon; and when, during a thaw, the clods appear alternately with the snow, that snow is more white and painful to the sight than when it mantles the entire surface.

These distinctions enable us to make a beginning in the classification of thought, or of the modes in which the operations of the mind are carried on in its internal or intellectual states, by furnishing us with the notion of one class of thoughts, which we may call *simple* or *primary*, and of another, which we may call *complex* or *secondary*: the former relating simply to things, and the latter to the relations of things, according to that extended and general meaning in which the word "thing" or "things" may be used.

The question then becomes, By what means and in what manner are former thoughts recalled,—former states of the

mind brought back in the absence of their causes, long after the causes themselves have ceased to operate? This is an important question; and it is one upon which we are very liable to err; and therefore it behoves us to deal with it cautiously, and in measured and guarded terms.

According to the common modes of speech, and also to the terms made use of by the majority of those who have written expressly on the subject, there is a *power* or *faculty* of MEMORY, which is subdivided into the *two powers* of *remembrance* and *recollection;* and these are in certain cases assisted by a *third power,*— the *association of ideas.* Now, the possession of any or of all of these powers is not only inconsistent with the nature of mind, as one simple and immortal existence, but the words themselves are of very doubtful meaning. They all imply a vague something, which can act independently of the mind, and even in opposition to it. When the outlines of the fable which is involved in them are a little filled up, it runs something in this wise:—The Memory is a kind of store, in which the information which we derive from instruction and experience is treasured up; Remembrance is the store-keeper that takes charge of them; Recollection is the porter that brings them out of the store for our use, and Mr. Association of Ideas is a sort of stapler, that puts them in order for us.

These, we believe, are commonly called "the intellectual powers," or powers of the understanding; but granting this, they are, withal, most refractory servants; for, like satraps of remote provinces, they lord it as they list, without any deference to the will of the mind, which is the great emperor of the whole. Every thing is not admitted into the store; what is wished for is not given out at the time; that which is not desired is very often pre-

sented in its stead; and Association is a saucy power, and will not work except for minds of a superior order.

The truth is, that the whole is a mere fiction, contrived, like other fictions, to occupy the place of knowledge while there was none; and, like them, continued afterwards, much to the injury of knowledge after it began to be obtained. The knowledge of that which has been once known does remain; and it returns to the mind, sometimes when we wish for it, sometimes when we would rather be without it, and sometimes it refuses to come even when we are most desirous of it. Indeed, if our desire is very ardent, it defeats its own purpose, and prevents the recollection of that which would come readily to us, if we were in calmer mood.

Thus, if we had a *power* or faculty of remembering, the possession of that would, in itself, involve the necessity of a power of forgetting; for it would be of small use to us to be able to call up the favourite thought at our pleasure, if we could not clear the way for it by repressing those of an adverse character. This, however, we find to be impossible. A thought will come, we know not how, and so completely take possession of the mind as to unfit us for thinking properly upon subjects on which, otherwise, we are most intent. If the thought which thus, so to speak, takes forcible possession of the mind, is of a painful nature, it may so harass us as to make us unfit both for thought and for action; and we are driven, by the desire of relief, to new scenes, or other new gratifications of the senses, and even to unmeaning frivolity or injurious dissipation. Nay, madness, or even self-destruction, may be the result to which we are driven by a thought that we wish to forget, but cannot; and this may happen even in cases where the subject of the thought is of very little importance one way or another.

Thoughts which will not come in obedience to our desires, are not productive of such disagreeable consequences as those which will not quit us. The reason is very evident; we do not naturally desire pain, but its opposite; and, therefore, the thoughts that we wish to call to memory are all of a pleasurable nature; and though an ungratified desire is to a certain extent an unpleasant feeling, yet the uneasiness is not quite free from hope; and thus it never falls so heavily as a positive evil.

That man possesses a *power* of memory, and a *will* to control that power, is not merely a false doctrine,—for it is fraught with the most dangerous consequences, and lays the axe to the root of all moral obligation. If man were thus endowed,—if he could make his returning thoughts just what he wishes them to be, he might set all laws at defiance, whether human or divine, and laugh the dread of eternal retribution to scorn. The arrow of the Almighty would come harmlessly to him, and he would be the unconquerable and incorrigible rebel in creation — an anomaly — a being which ought not and which could not exist.

Even granting that existence with the power of memory and of will were possible, and that man were exempted from all moral restraint and dread of the future, would his condition in the present life be improved? and would he be more successful or more happy? The very reverse, unless his power extended over the whole of nature around him. It is in the past that we find both the stimuli and the guide in our progress; and but for the warning voices it sends us, we should, like the beasts, have neither motive nor impulse beyond the gratification of our bodily appetites; and even these we could not gratify without instincts similar to what the beasts possess. Of the cases

in which even those of us that have the most experience are called upon to decide and act, very many are new to us, and still more have enough of novelty in them, to make them not exactly fac-similes of any of our former experiences: therefore, if we were thrown wholly upon our own judgment to select the case which we thought parallel, we should be continually making blunders; and in our difficulty of discovering the right example, we should often be delayed till the opportunity were lost, never again to return. The uncertainty of life would keep us in continual vexation, and the labour of doing even a very little, would speedily wear us out.

We must, therefore, reject the doctrine of these powers, not only as untenable, consistently with the dictates of philosophy and common sense, but as being absurd and impossible. But, though we must thus reject the doctrines, there is no reason for our ceasing to use the words, provided we understand the sense in which we do use them. Words are, in themselves, neither good nor bad; and if we regard them as meaning states or affections of the mind only, and not as expressive of powers or faculties which have separate existence, Memory, Remembrance, Recollection, Will, and all those which have been applied as descriptive of powers of the mind, intellectual or active, are just as good as any others, and better in a practical point of view, as they are already in common use.

The Association of Ideas is, perhaps, more objectionable than even those which have been mentioned. There is a double error in it. In the first place, it imputes to ideas a substantive existence, which they have not; and in the second place, it assumes a power of association, either in the ideas themselves, or in the mind whose ideas they are, which neither of these does or can possess.

The substantive existence imputed to these ideas, does not mean that they possess the qualities of the subjects of which they are the ideas, or that they are composed of matter. The idea of lead is not heavy, the idea of fire is not hot, and the idea of a steam-engine would not turn machinery, propel a ship, or drag a train of waggons on a rail-road. The immediate results of ideas are as ideal as themselves, though in those cases where we proceed with the confidence of experience, the idea of the result must precede the application of the means.

The fault is not in the substance of which ideas are understood to be composed, for that is as shadowy as need be—it is in the fact of supposing them to have any separate existence at all. It is a portion of the old idolatry,—the fancying of spectral images of things, which could be bandied about from mind to mind, just as material substances are from place to place, and not by continuity of motion, but a mysterious sort of sympathy. We daily hear of such expressions as one man giving another "his ideas" upon a subject, or of there being "ideas" in a book: in none of which is there any truth; for they are all figurative expressions. An idea means nothing other than that the mind is affected in some particular way; and it can exist only as a state of the mind, and nothing and no where else. Words, which are spoken and written, and pictures and other representations, produce the states of mind which we call ideas, but the ideas are not in the representations; for a speech, a page of a book, or a picture of the queen is surely not an idea; and yet these are all that are presented to the senses in these three cases. What is explained or communicated is not the idea,—it is the representation of the subject of the idea, though the same subject may produce similar ideas, or states, in the minds

of different men; but it may also produce very different ones,—as in the case of an illiterate rustic and an astronomer looking at an eclipse,—in a man who cannot read and a man who can read looking at a book,—and in an endless variety of ideas, many of which will occur to any reader.

But if ideas are nothing but states or affections of the mind, there can be no association of them. To associate, means to meet together, not only at the same time and in the same place, but with equal and reciprocal dispositions in all the parties that form the association; and this cannot be said of any two states of the mind. That the mind could in any sense be said to associate with itself, would be an absurdity; and to suppose that two states of the mind could associate with each other, would be supposing what is not possible; for, however rapidly the states of the mind may follow each other,—and they do follow with extreme rapidity,—the one must be at an end before the other can take place. Even when the subject of the one state or idea is the antecedent of the subject of another, in that sequence to which we give the name of cause and effect, there is no association of the states of the mind; and the simple notion of antecedence in the cause, and consequence in the effect, renders the association impossible. Mere sequence, however close it may be, is not cause and effect,—as, if a man fires a gun, and sees the moon the next instant, the firing of the gun is not the cause of seeing the moon, however immediately the one may follow the other.

The states of the mind, whether we call them ideas, notions, or anything else, are all effects, not causes: they are affections produced by some causes acting upon the mind; and no one mental state, be it what it may, can with propriety be considered as the cause of any other,

neither can any one of them exert any influence upon any other. They are mere affections, which, whatever may be the differences of their phenomena, occasion not the slightest change in the nature or the identity of the mind. There is nothing in the nature of the mind that can be changed, as it can neither be increased nor diminished, nor has it any combination of parts, the number of which can be altered, or their arrangement varied. The identity is also never lost, though there may be pauses during which we are not conscious of it, just as there are pauses during which we are unconscious of thought.

But though we may have no consciousness or thought during these pauses, which does or can again return to the mind, it by no means follows that we were without either of them at the time; for when any thought is out of mind for the time, our consciousness of that thought is forgotten also. If, however, the forgotten thought formed part of a train, of which some other part is remembered, we are conscious that there is a part wanting, though we are not conscious what that part is. This very consciousness of the want of part of the train, is, perhaps, one of the most frequent means by which the want is supplied. If the nature of the train is such as that it affected us strongly at the time, an emotion of desire instantly mingles with our consciousness, and the mind is aroused. In these states, thoughts crowd upon thoughts, in such numbers and with such rapidity, that we cannot perceive their relations so clearly as we do in the more tranquil states of the mind. As is the case with all emotions, this one may become so very intense, and the crowding of thought so rapid, that no heed can be taken of any one of the parts, and the whole mind becomes a chaos, in which the foundations of the thought are buried in the ruins of the super-

structure, just as the foundations of a tower are buried in its ruins, when it has been raised above the limit of stability.

The return of any thought, or former state of the mind, whether we consider it as a whole train of thinking, or only as a portion of a train, depends very much upon the degree of excitement and impression which it formerly produced, and also upon the state of the mind immediately preceding its return. In like manner as we recall and renew our joys and our sorrows, when we revisit the place of their occurrence, or see or hear of the persons or the other objects of them, or others which have a strong resemblance to these: so, all thoughts which were attended with emotion, or which strongly excited our former attention, either by something new or remarkable in themselves, by long continuance, or by frequent recurrence, return much more readily to the mind than those which made slighter impressions, and were more momentary and less frequent.

Our present feelings have also a powerful effect. Sorrows come to the mourner, and joys to the glad, in a way which would lead us to believe that, apart altogether from the moral character and consequences of our actions, we are, in a great measure, the authors of our own misery and happiness, even though our constant desire is to avoid misery and attain happiness. What are called the habits of regular minds, and also the moods of those which are more unstable in their thoughts and feelings, exert the whole of their force in throwing their own colours, whatever they may be, over every returning thought, as well as over the object of every present perception.

But, in any case of this kind, it would be incorrect to suppose that there is any association; for there is nothing more than that the mind is affected in a certain way; but the fact of its being so is a matter of observation, and not

of reasoning from principles; and our mental states are often made up of the joint effects of so many perceptions, remembrances, and feelings, that we are altogether unable to separate them by analysis, and estimate their relative influences, or even to tell their number, or why or how we are affected by them. That we are so affected we feel every day of our lives, and it would be very desirable that we could always tell why, because that would enable us to avoid the evil and enjoy the good; but our most careful analysis is always very vague, and often liable to error.

When we speak of analysis in the case of mind, we must always recollect that the mind itself is, in all its states, one and simple, and admits of no analysis; so that what we really analyse are the observed facts: that certain subjects of thought affect the mind differently, that similar subjects affect some minds much more than they affect others, and affect the same minds more in some states than they do in other states. It is in attempts to make an analytical arrangement of powers or properties of the mind, in imitation of the arrangements which we make of the mechanical or chemical properties of matter, that all the leading errors in this philosophy of mind have originated. Men have laboured and enmazed themselves in seeking that which was not to be found, just as is the case with idle dreamers after inventions in the arts; and in so doing they have neglected that which, had they studied it with the same ability and assiduity, would have amply rewarded them. But these labours, although they were calculated to give very false views of the nature of the mind, have not been in vain; for, though the parties thought they were studying the *nature* of the mind, they were in fact examining and describing its phenomena; and thus they did service to the cause of mental science, very much in the same way as the alchymists,

in their searches for impossible results, did service to the cause of chemistry.

After all our attempts to discover powers in the mind which can recall its former states, or in those states, or the subjects of those states, any power in the one by which it can control the other, we are brought back to the simple fact, that these former states do return to remembrance; and the best name that can be given to these returnings is *Suggestion*, as that neither implies nor excludes any power, any cause and effect, or any thing else to which we are in the habit of giving the name of "necessary connexion."

Of any general cause of SUGGESTION, we shall say nothing, neither would we be understood as considering that there is any power or principle in the mind, or any where else, to which the name can be applied. It is a general name for certain classes of facts, namely, the return to the mind of former knowledge and former feeling; and it is with these facts only that we have to deal, and not with any things mysterious, which may be supposed to be implied by the name.

There are two classes of these facts, the distinction between which is sufficiently obvious. The facts may simply occur to the memory, without any allusion to other facts. Thus, I may simply remember that I once saw a horse; and if I remember no more, then there is an end of the suggestion. But I may also remember that I saw a white horse, in a certain field, that it belonged to farmer Smith, and that I saw it at a specific time. The knowledge here is not ended with the mere fact of the object seen, as it is in the case when the simple fact of seeing the horse is all that is suggested; for there are many relations, all of which may be made sources of further knowledge, which knowledge may be extended to all that has been hitherto ob-

served; and I may even carry it farther, upon any one of the subjects between which and the fact of seeing the horse the relations are expressed.

The *white* of the horse naturally suggests that there are horses of other colours; and I may be drawn by one relation after another to study the whole natural history, economical use, and treatment of horses. The field may, in like manner, lead me to the scenery of the place, that to the topography of the district, and I may thence be led to the geography of the kingdom, or of the whole globe; and finally, as far as imagination can go in the regions of the stars. Farmer Smith, again, or even the field, may lead me to the whole economy of farming, the improvements of which it is susceptible, and the obstacles, whether of a general or local nature, which stand in the way of that improvement. Lastly, the day upon which I saw the white horse may lead me to my other occupations on that day, and from them to a review of my whole past life, and to plans for its future conduct.

There are only four relations expressed in the instance now given,—colour, in the horse; place, in the field; possession, in farmer Smith; and time, in my observing: and yet these four relations might lead to trains of thought, upon three of which mankind have been occupied for ages, and yet they are, even now, but partially understood. There are many other elements to be taken into account before we come even to a probability that we will enter upon any one of these trains of thought; but they are all opened to us, and that we do not enter upon them must be owing to want of preparation, of desire, or of both. It is customary to call in WILL upon such occasions; but Will is nothing but the joint influence of preparation and desire;—as much desire as makes us steadily and earnestly wish for the ac-

complishment of the object, and as much preparation as gives us a firm belief that we can accomplish it.

We need not observe that this suggestion of relations along with the simple ideas of things is by far the most important of our mental states,—the instrument by which we acquire all our knowledge, even that of the existence of our own bodies. Dr. Brown has called it RELATIVE SUGGESTION, in distinction from SIMPLE SUGGESTION; and although *Relational* would be a better epithet, we do not adopt it.

Though etymologies are not arguments, as the meaning of a word is perhaps not exactly the same to any two minds, yet they are of no inconsiderable use to us in treating of relations, and all other subjects of thought which have no separate substances or qualities answering to them; and thus, it may not be improper to consider the etymology of the word "suggestion," as preparatory for a few remarks on the leading circumstances by which it appears to be produced and modified.

"Suggestion" is from the Latin *sub*, under, and *gero*, I carry; and as it applies to the mind, it means nothing more than that the suggested idea, thought, or former state of mind, is to be carried on under the mind's present consciousness. When we say to a man, "Bear this in mind," and he answers, "I shall bear it in mind," he promises that he *will* have the *suggestion* of it always ready; and if his "will" is not a mere name, but a sincere and ardent wish, and a firm belief that he is in possession of means adequate to the accomplishment, he can in general fulfil his promise; for the desire is carried onward from thought to thought, weakening in intensity, however, as it proceeds, and after a time varying with the habit of the mind, the original intensity of the wish, the length of time, and the occupation of

the mind during that time, not returning in suggestion without some suggesting object. But, if the original wish was sincere and ardent, the suggestion will return from the very slightest circumstance; and the very making of the promise will facilitate the return of the suggestion, even when the original promise was not sincere.

Much depends upon the habit in such cases. A man who never makes a promise but one which, at the time when he makes it, he sincerely believes he can perform, never forgets his promise; whereas, if the promise is mere words of course, it is soon forgotten. But though forgotten, it is not lost; for it comes back much more readily than a thought which brings no reproof,—and broken promises are among the most barbed and empoisoned arrows that come from the quiver of the past, and they are sent home to the guilt-stricken mind with a force equal to that with which they adhere and rankle.

The term "suggestion" is, from its etymology, free from the more objectionable parts of the other terms which have been used as names for the same state, or affection of the mind. The verbal or essential part of it,—that which expresses the state, is the verb *gero*, which means simply *carrying*, not *fero*, which means *bringing*, or that that which carries does it in consequence of having a power or disposition to do so. We sometimes use the verb "to bring" indiscriminately both for *fero* and *gero*; but there is a difference in the meaning. In *fero* there is always allusion to a bringer; but in *gero*, there is no such allusion. "All men shall be *brought* to death," has no allusion to a bringer, for death is a state, not a place or being. All that is expressed is that "all men must, or shall die," which is stated simply as a general truth. But if we say, "the bodies of all men shall be *brought* to the grave," the word

"brought" has a very different meaning. The allegation is not general, as the bodies of some men are disposed of otherwise than by burial in graves; and in those cases in which the event shall happen there must always be a bringer. In the first of these instances—that in which no bringer, no distinct cause or agent, is implied, we may invert the terms of the sentence, without the slightest alteration of the meaning; for "death shall be brought to all men," is the very same as "all men shall be brought to death." The second instance we cannot invert, so as that it can express a truth, even in a single case. "The grave shall be brought to the bodies of all men" is not only not a general truth, for it is not true in any sense. The grave is a *fixture*, and cannot be brought.

In as far as the *gerens*, the "bearing," or "carrying," or "bringing," enters into the meaning of the term *suggestion*, as used in mental philosophy, the expression may always be inverted; for when a former thought returns in memory, we may say with equal propriety, that "the knowledge of it is brought to mind," or that "the mind" is brought to the knowledge of it. If we have not the reference to the mind, and refer to the thoughts or states only, the case is still the same; and the suggesting state or thought does not bring the suggested one, by any power which it has, any more than the suggested thought has power over that which suggests it. The suggesting thought precedes the suggested one in the order of succession, and the succession is so immediate that we can take note of no interval between them. This order of immediate suggestion is all that we can declare generally of them; and thus it leaves the reason of the suggestion to be sought for in the nature of the thoughts themselves.

SECTION XI.

RELATIVE SUGGESTION.

THOUGH, as has been hinted, any thing which can be regarded as a *general* cause of the return of our thoughts in simple suggestion, is no fit subject for philosophical investigation, yet we must not thence conclude that the return of any one thought is causeless, any more than the first impression which we have of it. There is no wandering in nature — no departure from those laws which the Author of nature has instituted for the government of every part of the system, and of which laws we can have no knowledge farther than we arrive at by generalizing the phenomena of that which is in obedience to the law. The *planets* got the name on the supposition that they were wanderers; but since the laws of their motions have been discovered, it has been ascertained that they are models of uniformity, —that they never deviate one hair without a very obvious mechanical cause, and very little even when such causes act upon them. There is no wanderer in nature but man, and he is a wanderer in his own estimation, and when he is in ignorance of his way.

Still there are many classes of events in nature, for which no general causes can be assigned: and the return of thought to the mind in simple suggestion appears to be, in a great measure, one of the number. There is a

shadowy probability indeed that relation of some kind or other, existing between the subject of the suggesting state of the mind and that of the suggested state, is the disposing cause in every case of suggestion; and that the mind cannot in any way pass from one idea or state to another, unless by means of some relation which exists between them, and which is felt by the mind, though it cannot in all cases be clearly expressed in words. Dr. Brown, whose modesty in the use of his talents was worthy of their transcendent nature, has these remarkable words: —"I conceive that all, or at least the greater number of them (of simple suggestions), on a more subtile analysis, might be reduced to the more comprehensive influence of *former proximity*." In very early life, and before the thoughts have that complex nature which they receive after the mind has acquired a considerable portion of knowledge, and the stronger emotions begin to operate, proximity appears to be the only means of suggestion. The infant eagerly grasps at the flame of the candle; but if its fingers are once burnt, it avoids the flame; and the flame suggests the pain and the effort to avoid it, obviously from the pain in the former instance following so closely upon the effort made to seize the flame. The earliest knowledge, that of the use of the muscles and the parts of the body which these put in motion, still more exclusively (if possible) follows this law of continuity of succession; and as this is the primary element, it is highly probable that we should find it taking the lead in all suggestions, if we could render our analysis of all the circumstances which affect the more complicated cases, so as to free them from all the modifications. The masters, or rather the master of this science —for Dr. Brown is the only one that has given clear and satisfactory views of this part of Mental Philosophy,—they

have not, or rather he has not, ventured to carry the analysis thus far; and, therefore, a popular volume — that is, a volume intended for ordinary readers— is not the proper vehicle for its first communication. We shall, therefore, take Brown's arrangement of the *Primary Laws* of simple suggestion, and of the *Secondary Laws*, or modifying circumstances, only remarking as we pass that they ought perhaps to be all considered as modifications.

According to Dr. Brown, the primary laws are three :— Resemblance, Contrast, and Nearness of time and place,— though the last of these is evidently a modifying circumstance rather than a primary law, as these are only two of the most remarkable cases of proximity — of former proximity between the suggesting and the suggested state; and indeed the fact of proximity is to a great extent involved in the relations of resemblance and contrast.

Resemblance.—In order that it may meet all the varieties of the case, a very wide range of meaning must be given to resemblance, as one of the primary, or even of the secondary laws of simple suggestion. The resemblance may be that of likeness as apparent to the senses, as in two persons, or two things of any sort, or two phenomena, or any thing else that affects the senses in the same manner. It may also be the resemblance of a picture, or a written description to its subject; or a resemblance in place, in time, or in the state of the mind; and all these, with a number of modifying circumstances, are often so much blended with each other in recalling a former state of the mind to remembrance, that it is not easy so to analyse the result as to be able to say how much belongs to the one, and how much to the other.

When the resemblance is complete in all its parts, as in the case of another person who is exactly like one with

whom we were previously acquainted, or in a portrait which is faithful to the likeness of one whom we have known, whether painted with the intention of representing him or not, the suggestion is instant and complete; though there are some states of our general feeling in which even those likenesses strike us much more forcibly than they do in others, though we are, in many instances, not able to tell why this should be the case.

But the resemblance does not in all cases require this agreement in the whole of the details, in order that the suggestion may be complete; for a single point of resemblance in any one particular will recall the past state of the mind, and the object which occasioned that state, in the most vivid manner, and true to the most minute particular. When Captain King observed, in one of the remote isles of the Pacific, an old and disfigured pewter spoon with the word "London" stamped upon it, it brought all that he knew and had experienced in England as fresh and vivid to his memory, as if the map of the country had been spread out before him for a whole day, and some one had been engaged in reading the description to him.

Resemblance is a word of very varied meaning, as applied to the mind,—it means that the mind is affected *similiter*, "in like manner," in one case as in another; and the subjects by which it is thus affected may either be those of present perception, as fast as the mind can proceed from the one of those to the other, or they may be at any distance in place or time; all that is required is, that the mind shall be affected in a like or similar manner in them both; and this obviously depends in part upon the mood of the mind itself, as well as upon the resemblance of the subjects of the similar emotions.

If the mind is in the proper mood, the mere name of a

person, heard in sound, or seen in writing or in print, will suggest all that we have known of him, as readily and as completely as the best picture that an artist can produce; and yet, if we consider them in themselves, and without regard to the knowledge which has been formerly acquired, there is no resemblance whatever between the name and the individual, and not much in the case of the picture. The words "William Shakspeare," whether heard or seen, have certainly no resemblance to the Great Dramatist, either in his appearance as a man, or in his genius as a delineator of human character; and to a person who never heard of Shakspeare they can suggest nothing, though they may produce a desire to know, as such a desire is natural to us in the case of every new impression on the sense, whether of hearing, of sight, or of any other. There is, we believe, no portrait which can be regarded as an authentic likeness of Shakspeare; but there is some similarity in the greater number of those which are engraved; and this makes them suggest the idea of Shakspeare, just as readily and as completely as if they were all fac-similes of a portrait for which he had sat when in life.

It is the endless variety of the resemblances which suggest thought, and the very slight degree which, in many cases—in the great majority of cases indeed—answers the purpose, which forms the most valuable part of the affection of simple suggestion, and gives to conventional symbols, such as the sounds and the letters and words of language, the attributes of suggesting ideas and states of mind, to the real subjects of which the symbols have often no resemblance whatever. In the letters of the Greek alphabet, there is certainly a sort of fanciful resemblance to the position of the organs of speech while pronouncing the sounds. But it is most likely that this, like the rules of grammar,

is a subsequent discovery, and had nothing to do in the original formation of the letters.

In many of the cases in which we consider resemblance as the leading circumstance in suggestion, the real suggesting principle—if principle it can be called, is the same relation between the subjects of the suggested and suggesting thoughts; and, indeed, resemblance is nothing more than a general name for a great many relations. Hence, when we speak of Simple Suggestions as distinct from Relative, we speak of it, not with reference to that which suggests, but to that which is suggested. Simple Suggestion brings the thoughts together in the mind, by means of certain relations between the subjects of those thoughts; and Relative Suggestion enables us, from the comparison of those subjects, to discover new relations between those subjects, or between them or either of them and other subjects. Thus, the knowledge of relations is the real foundation of all our intellectual states; and it is on this account that the exercise of the mind is called *Reason*, and that man is called a *Reasoning* or *Rational* being.

One of the most valuable applications of suggestion from resemblance, as arising from the relation of proximity in time, and not from any quality or similarity of the suggestor and the suggested, is the use of language, which is purely of human invention, both in the sounds as spoken and in the characters as written. There are many words in which the sound of the word has some resemblance to the natural sound of that of which the word is the name,—or, as it is said, "the sound is an echo to the sense." Thus, the Greek name for the sea, *Thalassa*, has been considered as peculiarly expressive of the sound produced by the breaking of a wave on a pebbly beach; *Boæöo*, of the lowing of an ox; *Salpingo*, of the twanging sound of a trumpet; and so

on in many other cases. But, as in the case of the letters of the Greek alphabet being expressive of the moveable organs of speech in pronouncing them, it is probable that these are discoveries *after* the use of the words. The name of the sea is derived from its pale green colour resembling that of the young sprouts of plants ; and the name of the ox, and also the expression for its lowing, are derived from the animal being tended by a herdsman, and the last of them is the general term for noise and clamour, whether that clamour happens to resemble the lowing of an ox or not.

The same shadowy resemblances, founded upon relations rather than upon qualities, give rise to the use of figurative language, and, indeed, to all that affords us so much delight in the fine arts. They are the sources of all those personifications to which allusion has already been made, as being so very general among mankind in the comparatively rude stages of society. Poetry is the natural or rather the first language of nations, and they must have made some advances in philosophy and reason before their language can be sobered down into prose. In the history of literature, the great poets of every nation have made their appearance before the writers on philosophical subjects; and the intimate examinations of the properties of material substances, with their applications to the arts, are uniformly to be found in the later periods. The truth is, that there is no poetry in physical researches, or in the applications of mechanical and chemical principles, and, therefore, though men have more physical desires and physical possessions, when the useful arts are in a state of high cultivation, it is by no means so obvious that their mental pleasure is so great as in the ages of poetry and prejudice.

As this more sober and philosophic occupation of men

gains ground, and the new wants which it brings demand that a larger portion of the time of the majority shall be expended in labour, the general language separates from the language of poetry; and the poets become fewer in number and inferior in vigour. Personal invectives, dull conceits, and artificial witticisms, seldom rising above the level of a pun, mark the declining years of the Muses.

The language of genuine poetry is the language of the passions, or, to speak more correctly, of the emotions; and as rude men act more upon their immediate emotions than upon the deductions of reasoning, their speech must necessarily be in accordance with the impulses upon which they act. They people all nature with divinities, and having done so, they address all nature as if it were alive and could hear them. Their addresses and all their sayings are, however, short and abrupt, and their transitions from one thing to another,—from the extreme of grief to the extreme of joy, and the same in all other extremes,—are so quick, that it is impossible for those who are accustomed to reason and to proceed rationally in their conduct, to follow or even understand them.

We can find an illustration of this in the conduct of a child. Not that children are technically poetical,—that they make verses, or that they use metaphorical or other figurative languages, — they are too young for that, as those passions which give power and effect to practical language have not yet come into action in them. Simple pleasurable and painful feelings, which have no definite objects, are the means by which they are excited; and these have the most immediate and powerful effect before the children are able to express in language the causes either of their joy or their sorrow: and, in civilized society, as they become familiar with the use of speech, and are

able to tell what they wish to have and what they wish to avoid, their passions become more tranquil; and, as they grow up towards maturity, they gradually assimilate to that society in which they are placed. If they are among the very illiterate and ill-regulated only, they continue the slaves of their passions, and when they come to maturity, that intellect which, had they been placed in more advantageous situations, would have enabled them to speak and to act wisely, takes the form of cunning; and their aim through life is the gratification of their passions to the greatest extent and with the least trouble, without any great care, or indeed perception or knowledge, of the rectitude of the means. Thus associating and thus neglected, they partake in a great measure of the character of the savage; but it is of the worst part of that character; and the reasons for this are easily seen: the rude man, where all men are rude, is lord of the forest in the ratio of his physical strength and his animal courage; and, so that his eye is the keenest, his foot the fleetest, and his arm the strongest, he needs no possession of wealth or mental refinement to entitle him to a high place among his fellows—such high place as is to be found where, in an intellectual point of view, all are so low. In advanced states of society, where property and the possession of talent—that is, of intellectual cultivation, or that connexion and influence which, one cannot very well tell why, are often more effective than talent, or even than property, come into operation, the mere body, be its vigour what it may, sinks to a very small value; and turbulence of the passions, which in the rude ages is a means of distinction, is restrained by laws, and punished as a crime committed against the general weal of society. Thus, the very same description of person who, in a rude state of the whole population, would be honoured

and exalted as a hero, is shunned and persecuted as a ruffian, where the general character is more intellectual and refined. If Homer's heroes, or even the gods of his mythology, had lived as real mortals in England at the present time, the "queen of heaven" would have been "known to the police;" the goddess of wisdom would have been no stranger to the tread-mill; and even Jove himself might have visited Newgate, or been sent on his travels to Australia. Yet the age of Homer, all unsettled as it is in its chronology, was the age of poetry; and in many of what are regarded as the higher attributes of poetry, Homer has never been equalled, and never can be equalled by any bard of a nation or time of civilization. Of modern poets, perhaps Burns is the one who, though in a very different style, comes nearest to the Mæonian in cleaving his way to the hearts of men, and burning and shining there; and Burns had the knowledge of a sage and the passions of a rustic combined in high and nearly equal proportions, —was a man that did not belong to the times or the country in which he flourished; and, therefore, they who have praised, and they who have censured, have done equal injustice to his most extraordinary character.

A very large portion of our suggestions, and these, too, of the most striking kind, are called up by those shadowy resemblances which are veiled from all save poetic eyes; but they scarcely belong to the ordinary class of simple suggestions, and, therefore, it is not necessary to enter into the details of them.

Contrast, or *contrariety*, is the second means to which simple suggestion has been referred. The opinion of Hume upon this part of the subject is so curious that it is worth stating:—"When two objects are contrary, the one destroys the other, i.e., is the cause of its annihilation, and the idea

of the annihilation of an object implies the idea of its former existence."

This, it must be admitted, is a very singular passage to have been penned by the man who, whatever may be the objections to the tendency of some of his doctrines, is generally allowed to be among the most acute of the metaphysical writers. The position, of which Hume gives the quotation which we have made as a demonstration, is this : " Contrast or contrariety may, perhaps, be considered as a mixture of causation and resemblance." This is certainly a very curious kind of proposition in itself, and nothing but an equally curious demonstration could be expected to satisfy it. Causation and resemblance form a very strange mixture, as, according to the ordinary meaning of language, the one is the very opposite of the other. Whatever we may mean by a cause,—and we really know nothing about any cause farther than that it is followed by an effect,—the cause and the effect must be different. Causes may be like each other, and so may effects, and this is indeed the principle on which all our judgments from experience are founded. An *effect*, which literally means " that which is made out," and which must be perceptible either by the senses of the body or the internal feelings, must be an event of some description or another. Our only means of judging of the cause of any effect is from the nature of that effect itself; and though the fact that " like effects are produced by like causes," is one of general belief, and one which if we do not believe, we can believe nothing; yet there is not only no resemblance between any one cause and its effect, but they are not considerations which admit of any comparison with each other, so as to enable us to say that they are either alike or different. A cause is really nothing more than the fact of the happening

of an event; and this cannot in any way be either like or unlike the event itself. The very supposition that a cause were like its effect, would be a direct denial of both; for it would be saying that no event, no change whatever, had taken place. A cause is not in itself an object of perception either by the senses or by the mind. We believe that causes exist when they are not in operation; but we cannot prove our belief in such cases, and, whatever may be our belief about it, a cause which never produced any effect is really no cause at all. When an effect has been produced, we invariably ascribe it to some cause; and thus the perception of an effect, or the recurrence of a former one to the mind, always suggests the idea of a cause; but that a cause can suggest an effect, is impossible, since the effect is the only means by which any cause can be known to us.

And the knowledge which we obtain from the single occurrence of any effect is very limited: we *believe* that there has been a cause; but of the nature of that cause we know nothing. Even when the effect is exactly similar to one which we have often observed, and with which we are as we say familiar, we know nothing of the cause. We are so constituted that we can no more help believing that it is the cause when the effect is the same, than we can help believing the fact of our own existence; but whenever we endeavour to obtain a knowledge of what the cause is in itself, we always find ourselves brought to the effect of a former cause; and thus, when we attempt to embody the fact of causation, so as to make it a subject of thought, which we can express by the pronoun "it," we are always brought to the simple juxtaposition of two events, the one of which precedes and the other immediately follows in the order of succession or time.

But this does not affect our belief in the fact of causation one way or another. The *happening* of an event is not the less true that it is not itself an event; and the fact of a Creator of all things, to which we are invariably led when we attempt to trace the succession of cause and effect, in an inverted order, or from effect to cause, is not the less true that the fact of creation is not the things created. The steps of our thoughts upon this succession bear some analogy to our steps in walking along a road. In that operation our feet are successively planted on certain places of the surface of the earth; and this, in so far as the fact of our walking is concerned, is all the contact or connexion that we have with the solid matter of the earth. But these steps are not the causes of our progressive motion. They are literally what their name implies, *stops;* each is the end of the temporary motion of the foot which is planted; and the mere fact of planting the foot cannot be the cause of its being again moved forward to take a fresh step or stop.

These steps are the "events" of a certain succession of muscular exertions, which exertions are the immediate causes of our progressive motion; but every time that the foot is planted the exertion by which it was brought to the place where it is planted is at an end, and no observer can have any knowledge of it further than the mere event.

In all causation it is the same. We observe the successive events, and we observe nothing more; but this is no argument against the existence of what we feel and believe of causation, any more than our inability to explain the origin of muscular exertion is any argument against the existence of that faculty in a human body when perfect in its organization and in good health. Causation cannot

therefore be a general means of suggestion, or a means of simple suggestion at all. It is known to us only as a relation, and a relation of succession, of which we cannot obtain the same sort of demonstration as of the relations of subjects which co-exist. Similar effects always suggest the belief of similar causes; but it is the belief only that they suggest, and this belief may be either true or false until we have proved it by experience.

We must, therefore, reject causation as having anything to do in the case of the one of two contrasted subjects suggesting the other; and thus Hume's suggestion of contrasts resolves itself into resemblance only, and his proposition is a contradiction in terms. We need not, therefore, wonder that his attempted demonstration is absurd, and that he should consider the "annihilation of an object" as the best means of putting us in mind that it existed.

The word "object" is improper in the sense in which Hume uses it; for it is not the object but the idea of the object which is under consideration: and though an idea may be forgotten for a time, it cannot be annihilated. We can have no idea of the annihilation of any object, as we have no instance of such an occurrence; and even although we had, it would not in the least affect the existence of the idea. Yesterday is gone, never more to return, but the idea of yesterday is not. An idea has no separate existence, nothing in itself which can be annihilated. It is a mere state of the mind; and that the mind has been in any state already is sufficient proof that it may be in the same state again. Some states of mind are much more beneficial, both in themselves and the consequences to which they lead, than other states. We are so formed by nature that we desire these advantageous states: experience teaches us that the states of the mind follow each other in particular succes-

sion, even when we are unable to say that the succession is influenced by the immediate affection of the senses; and all that we mean or can mean by our inquiries concerning the phenomena of suggestion is merely to find out the circumstances which make those states of the mind follow each other in one order of succession rather than in another. In all this, however, we are only observers, and can invent nothing; but the observation is of the utmost value to us in the regulation of our conduct.

Contrast is unquestionably a means of suggestion; and it is so just because it is resolved or resolvable into something else. Our actions all proceed upon contrasts; for we act, in the hope that we shall thereby get into a state more comfortable than our former one; and, as all actions, when we "mind what we are about," are thoughts or mental states before they are external actions, the natural conclusion is, that the law of action and the law of thought is one and the same.

Still there is a peculiar kind or form of suggestion which may be referred to something like resemblance; and that is the nature of the subjects of the contrast, or rather that property, quality, or other circumstance, whatever it may be, which forms the basis of the contrast. If two subjects have nothing in common,—they cannot be contrasted with each other. We cannot, for instance, contrast time and space; nor the current of the water of a river with the progress of our thoughts. Contrasts are, in all cases, opposite portions of some scale of comparison; but in a natural contrast the two always belong to the same scale. Sometimes this scale is expressed in measures or by number, and sometimes it is not. Sometimes there is a standard of comparison at an intermediate part of it; as for instance, in our feelings of degrees of heat, according to which we

call all substances that warm the body hot, and all that cool it cold. Sometimes we consider the scale as extending down to *zero*, or nothing: and there are even cases in which we extend it below *zero*, and thus have a negative scale — or scale for that which is wanting, as well as for that which is in existence; but this negation, which we express by the portion of the scale below *zero*, implies a relation. When we say *minus* 3, or, as algebraists write it, —3, or that a man who had a leg amputated is *minus* a leg, all that we mean is, that 3 are wanting in the one case to make up a certain number, which may or may not be spoken of at the time, and in the other case, that the man wants a leg to complete the number that usually belongs to man.

In these cases, which may be called simple or philosophical contrasts — contrasts in which there is no personification, and no allusion to our emotions, the one part of the scale has always a tendency to suggest the opposite; and this tendency is greater the higher the degree of that consideration which, as we say, suggests the other. The fact is, that in very many of these simple cases, the subject, and consequently the idea, becomes its own contrast by our merely looking at it the other way. Thus, the road between London and Edinburgh remains the same in itself whether we consider it with reference to the one of those cities or the other; but, when in London, it is so many miles *north* to Edinburgh, and when in Edinburgh it is so many miles *south* to London. In like manner, we think on the height of the hill when we look to it from the valley; and of the depth of the valley, when we look to that from the hill. In fact, when we refer objects, whether of immediate perception or of thought, to the one end or the one portion of the scale, our own portion, or something

else which we take as a standard of comparison, is always referred to, or if there is no such reference, the one end of the scale always presents itself along with the other. A suggestion of contrast cannot, therefore, be strictly considered as a simple suggestion, as there seems to be always the relation of a comparable quality or circumstance involved in it; and this necessarily involves the other member of the comparison, which takes its station as far on the one side of what we consider the standard, as the suggesting thought does on the other. The contrast thus doubles the effect of the suggesting idea, whatever that may be in itself and without amplification; and this is the reason why scenes and subjects in which there are bold contrasts, make so much more powerful and lasting impressions on the mind than those which are tame and monotonous.

But this very circumstance speedily takes cases of contrast out of the class of simple suggestions, and includable in that of purely intellectual states, and blends them with emotions; and, in the strength of these emotions—if they are of the more energetic kind — the mind is carried away beyond the sober philosophy of thought. Contrast rises upon contrast, and feeling mingles with feeling, until a whole empire of thought is subdued, and the mind, for the time, spurns all the ordinary restraints of caution, breaks down the common distinctions of sober philosophy, and lands it over the whole extent of its knowledge. If that happens to be great, then the result partakes of its greatness; but if the knowledge is limited, the only result of this mental excitement is some display of the animal passions, always faulty, and often pernicious; and one of the very worst evils of ignorance consists, not in its leaving us without a guide in our active moments, but in leaving us to the full, and often to the fearful influence of our passions,

in those states of excitement where we are in most peril from them. Thus the allegation of the satirist is not wholly without foundation; for the veil which separates mental inspiration from temporary madness of passion is but a thin one.

When the emotions have not been greatly excited, and all goes calmly on, our suggestions of contrast follow that natural law of contrast to which we have alluded—that is, the contrast follows the resemblance in kind between the subjects contrasted, and has the contrast only in the degree of some quality or circumstance which belongs in common to them both. Hume was a man remarkable for the philosophic equanimity of his mind; and this is probably the reason why he went so far wrong on this part of the subject, as to suppose that contrast becomes a means of suggestion in consequence of one of the contrasted ideas annihilating its opposite, and by that means bringing the idea of the former existence of the annihilated subject to the mind, rather than by that simple suggestion of the one idea by the other, which is the actual process.

CONTIGUITY, whether in place or in time, is the third cause to which simple suggestion has been referred, and it is understood to come much more frequently into operation than either resemblance or contrast. When, however, we speak of any means of suggestion, we must bear in mind that much depends upon the character of the mind to which the suggestion comes. Before an idea can possibly return to the mind, that idea must have been previously entertained. Without this, it evidently cannot return at all, and even when it has been entertained, it will return the more readily the more that it is in accordance with the general train of thought.

But, if allowance be made for the different degrees of

preparation to which different minds have been subjected, then there is no doubt that very much depends upon simple contiguity; and thus, by proper attention, time and place may be made very valuable means of artificial memory. This means of suggestion is much more simple, as well as much more general, than either of the two preceding ones; and therefore it is the chief resource of minds of what we may call an inferior order—of those that are but little in the habit of tracing analogies or making new discoveries. The great bulk of mankind remember places in their juxtaposition, and events in the order of their succession, much more than by any other means. Their topography of localities, and their geography of more extensive portions of the earth, are all arrived at by their contiguity much more than by their latitudes and longitudes, or their bearings and distances. There are, for instance, few persons who do not know that Pekin is the capital of China, that it is in the east of Asia, and at no very great distance from the sea; but there are, probably, not many who could say at a word whether the rhomb line, or great circle of the globe, extending due east from London, would pass to the north or the south of Pekin, as this rhomb line has no immediate reference even to the parallels of latitude as they are represented on the map. This rhomb line passes to the south of Asia altogether in the eastern longitudes, and on the opposite meridian to that of London it reaches as far to the south of the equator as London is to the north. Although, therefore, contiguity of place is one of the most easy means of memory, it is one by the help of which very little of the means of acquiring knowledge is treasured up. It is the same with the order of succession in time; and we generally find that those men who are the most perfect chroniclers of events have very little knowledge of the rela-

tions and influences of those events of which they can so readily tell the order of succession.

This, which is usually called the power or faculty of simple memory, never belongs to those who show by the result that they are the master spirits of our race. They are very regular and formal persons, and, therefore, they are admirably calculated for occupying the subordinate places in society; but they never enter into trains of profound thought, or plan great designs, though they very often profit more by the designs of great men than these themselves are capable of doing.

Some degree of this simple memory is necessary for every man; and, therefore, to a certain degree it is worthy of cultivation: but there is a point beyond which it always does mischief to the character of the mind; and it is highly probable that the system of committing by rote in the elementary schools, does far more mischief in this way than it does good in any other.

It is to the recurrence of thoughts in consequence of *former* contiguity of their subjects that allusion is here made, for if the discovery is made at the time, it is an original effort, and not memory in this simple sense, in which it implies only the return of a portion of our former knowledge, and not an addition which has been made to the stock; and even in the case of this mere memory, there is a distinction to be made between that which we have acquired by being simply informed by others, and that which we have mastered by our own exertions. That of which we are told without any effort on our part, may be in itself vastly more important than that which of ourselves we acquire; but there is a vital principle in our own discovery which the other never possesses; and that which we have found out not only comes back in memory much

more readily than that of which we have been informed, but it is more likely to be productive of additional knowledge at each return.

The mere memory of that which we have been told, when it is not of so personal a nature as to excite our emotions, is effectless and fleeting in almost the very same proportion as it is easily acquired. Idleness may deceive us in some cases; but where equal diligence is shown, the boy who takes his early steps in knowledge with most apparent difficulty, generally proves in the end both the better scholar and the abler man; while he who can commit words to memory almost at first reading, grows up a lighter and less stable character.

The same distinction holds throughout the whole of life; for we spend our time most unprofitably if we are not at school during the whole period of activity; and as these are many of the most important matters, of the necessity of learning which we have no idea until the practical necessity presses them upon our attention, an aptitude for learning,—for taking experience by the forelock as well as time, is the most valuable habit that we can possess, and fortunately it is a habit which is within the reach of every one, and so easy and natural in the acquisition, that it would in many cases form itself, unknown to us, if we would not prevent it by our own conduct, or get it prevented by the conduct of others.

If we would acquire this most valuable habit,—a habit which is essential to the conducting of all important business, and for security amid the contingencies of life, we must not rest satisfied with the mere reason of the case, but must enlist the desires and emotions in its service, as the stimuli which are to spirit us onward. If we allow them to be unconnected with our regular occupation, whe-

ther that occupation be professional or not, they are sure to be continually breaking away, and distracting us from our purposes; and if they are once allowed to wander, the bringing of them back to such a state as will allow us to enter upon any train of serious thinking and to pursue it to a proper conclusion, is always difficult, and very often quite impossible.

It is probable that our ordinary plans of education are of too scholastic and technical a nature for carrying the emotions of the young along with them, to the extent that is necessary at an age when we are far more disposed to obey their immediate impulses than we are after we are more advanced in life. It will not be denied, at least by those who have given the subject that consideration which its importance deserves, that very many of our school exercises are irksome to the boy in a much higher degree than they are calculated for being useful to the man in future life. All circumstances considered, it is perhaps impossible that there should not be some imperfections of this kind. Our systems of education, and also those institutions which give the leading tone and character to education in that part of society which the rest of it are most prone to imitate, had their origin in times when the great body of the people could not even read and write; and when, consequently, learning had really but little influence on the working part of society. This working part is the one which has subsequently made the chief advances; and the systems and institutions, of how much value soever they may be, have no very vital principle of improvement in them. The consequence is, that they are at present probably as much behind the general spirit of the age as they were before it at the times when they were contrived and established.

The supplemental education which society has found for itself is not, however, the general education of boys to fit them for acting their part properly, whatever that part may be, but the technical education of men for particular pursuits; and, therefore, however much or well it may contribute to readiness or accuracy in the particular occupation, it confines the thoughts too nearly to that occupation, and thus not only prevents that general exercise of the mind which fits man for any station at which he may arrive in society, but actually cramps him in that very occupation by which the thoughts are engrossed. The various occupations of men have so many relations to each other, and to times, places, and other circumstances, that no man who devotes his whole mind to any single one, be it what it may, is capable of turning even that one to the greatest advantage. He is in danger of becoming a mere copyist of others in his youth, and of himself as he advances in life; and thus his mental states never rise higher than simple suggestions, and his emotions are excited chiefly by the cravings of his bodily appetites and their gratification.

The circumstances which have been mentioned are the chief of those which have been regarded as the primary or most general means by which former thoughts return to the mind, in the most simple way in which they can so return—that of mere memory; and they are at least the leading ones, whether we call the fact of the return of a former thought under some circumstances, and not under others, the Association of Ideas, Simple Suggestion, or any thing else. These laws, or rather perhaps phenomena, of simple suggestion are common to all minds, and to every thought or former state of the mind. But there are some other circumstances, arising from the differences of men,

and also from the different modes in which the suggested thoughts have been formerly entertained, which have no inconsiderable influence on the readiness and force of the suggestions, and, therefore, it will be necessary to devote a few observations to them.

SECTION XII.

CIRCUMSTANCES WHICH MODIFY SIMPLE SUGGESTION.

THE circumstances which modify simple suggestion, so that it may come more readily when occasion requires, be more vigorous when it does come, and by being so, lead the way more readily to relative suggestion, to emotion, and to action, may be arranged into two classes. The first of these classes may be taken as including the differences between one human being and another, in the aptitude of having suggestions generally, and also suggestions of particular kinds in preference to those which are different. This class of circumstances may be regarded as the preparations of the mind for the suggestions; and as such, they have considerable influence in determining the particular description of thoughts which return to the mind in suggestion, in preference to others. The other class, which includes the particular circumstances under which the suggested thoughts accrued on previous occasions, may be regarded as more immediately preparing the thoughts for being suggested; but the two classes, like many others into which we attempt to divide the phenomena of mind, often run so much into each other, that no very clear lines of distinction can be drawn between them. The second class of modifying circumstances, as coming to a considerable extent within the limits of observation, admit of subdivision and definition, to some extent at least; but those which relate to the

different aptitudes of different minds for simple suggestion generally, or for the suggestion of particular thoughts or trains of thought in preference to others, are less within the range of observation, and, therefore, they are much more difficult to deal with, and the conclusions to which we are able to come respecting them are of more indefinite character.

The aptitude of the mind itself for receiving suggestions, and turning those suggestions to the proper account, involves the somewhat curious question of Genius, or the want of Genius, which, though frequently spoken of, appears not to be very well understood.

GENIUS, which signifies "that which can produce," is mentally applied to the capacity or faculty of tracing new relations and analogies, and from these producing new forms and trains of thought. It cannot be said to produce any new elements of thought, for all the creations of genius, as we call them, are productions of forms, not substances; but it can place those materials of thought with which even ordinary minds are familiar, in combinations and in aspects and lights so peculiar and so striking, that they produce more effect than ordinary novelties, even when the elements of them are subjects with which every body is familiar. Genius commands the attention of mankind, even in those cases in which they neglect and ill-treat its possessor; and there are recorded instances of monarchs delighting themselves with the productions of a man of genius every day, but leaving the man himself to live in the utmost penury, and even to perish for want of the common necessaries of life. Genius, when properly directed, always confers a favour on society; but it very often happens that he by whom this genius is possessed has no reward beyond the pleasure which he may derive from the exercise of it. So that, in

so far as success and comfort in the world are concerned, genius is perhaps the least desirable of all human endowments. It is, however, one which is very generally desired, and the desire of it is so strong that very many assume the possession of it, and endeavour to imitate the form when they have none of the reality; and there are few of the race that cut a more ludicrous figure than pretenders of this description. Our present purpose, however, is not with the reward of genius, or with the condition either of its possessors or of those who pretend to the possession of it; but with the fact of its existence, and the influence of it upon the suggestions.

The Greek term for poetry, of which our common English name is little else than a transcript, is nearly synonymous with "genius," only the poetry is that which is made, and the genius is the maker; and, true to this original analogy in the meaning of the word, all the productions of genius, be they in what form they may, are in reality poetry. Versification, to which we sometimes limit the application of the term, is only one of the modes of poetry, and by no means monopolizes its essence. Versification is an art, which the possessor of genius can make the vehicle of the creations of genius; but at which the very dullest of mankind—or of womankind either—may drudge and labour, especially by the aid of rhymes, which come

> "———like watchmen, at the close,
> To keep the verse from being prose;"

which office, however, the said rhymes perform very lamely, even though they are the most perfect echoes of each other in their sounds. Of every hundred versified productions, it is really not uncharitable to say, that ninety-nine are in this predicament; and, which is not a little remarkable,

and would be a paradox were it not a well-established fact, many of those who are highly poetical in their prose, are most lowly prosaic in their attempts at versification. But, be it verse or prose, painting or statue, any thing in nature or in art, the mind which is imbued with the spirit of genius will find poetry in it, and fetch that poetry out, not only in words or by other means which can be rendered permanent, but in the very air and expression of the body, even though that body is, according to our ordinary notions of such matters, the very reverse of handsome in one and all of its lineaments.

The existence of this genius cannot be denied, for it is demonstrated by that which it produces; but the question, "Whence comes it?" arises, and will not be satisfied without some kind of answer. The usual one is, that it is natural—a chosen gift of the Deity. This is true in a vague and general sense; because, if men had never existed, they could not have had genius,—or any thing else. At first sight, too, it has the appearance of being pious; but when we examine it more closely, the piety vanishes. If genius is a special gift of Heaven to the individual, so also must be dulness, and folly, and vice, and all the distinctions of the human race. This is quite inconsistent with every idea that we can have of a Being infinitely powerful, wise, and good, however inadequate our ideas of such a being may be; and therefore it cannot be true. Besides, it is at variance with all that we know of human nature, and all that we can rationally, that is, with knowledge, believe concerning it.

That there may be great differences in the sensibility of the body, as well as there are in its stature and appearance, we can readily understand; and also that these differences may affect either some particular organ of sense, or the

whole body generally. Thus there was, and perhaps is still, in Edinburgh, a gentleman who could not distinguish colours, and who had yet so clear a perception of forms, that he was a designer, and a most tasteful designer, of ornamental works in brass; and yet, according to the common and indeed the only theories that we can have upon the subject, colour is all that the eye can see. There are also many whose general sense of hearing is so acute, that a whisper unheard by others who are close to the whisperer is audible to them at the distance of a good many feet, and who are yet so perfectly insensible to musical sounds that the sweetest melody does not affect them differently from the noise made by the creaking of an ungreased waggon, or the sharpening of a saw.

These bodily differences—and the list of them might be extended to every particular sense, and to sensation generally—may, and indeed must, be considered as original or constitutional, in those cases in which we can trace them to no casualty that has happened to the body; though, in other cases, they are obviously the effects of disease. But, whatever may be the causes of these bodily differences, and whether they consist in inferiority or superiority to the average, we can, and do, always refer them to organic differences, whether we understand in what those differences consist or not. The parts of the body are very many, each of them comes into action in one or other of its functions, and there are many of these functions in which a number of them act together. Each of these almost countless parts may vary in an immense number of degrees; so that, were we to calculate the permutations of which the whole are susceptible, we should find the comprehendable part of our arithmetic quite unequal to the task. Of this, we have a collateral proof in the fact that those diseases, which have

no local symptom, and are attended with no topical derangement of the system, have, in all ages, been the especial province of quackery; and if cures have been effected in any of them, it has been by faith in the physician rather than by works that he has done; or if his prescriptions have in any instance been curative, unless as operating on the faith of the party, then we must ascribe them to chance rather than to skill.

By these remarks, we intend no censure on the professors of the healing art, who have just as much honesty, and, generally speaking, more information, than almost any other class of professional men. It is their very superiority, indeed, which makes the illustration drawn from them so valuable. Where there *are* data, no man can be more quick in the perception of them, or turn them more promptly and accurately to account, than a well-educated and experienced medical man; but when the doctor can observe no symptom of disease, and the patient can give him no information farther than that all is wrong, and yet nothing specifically the matter, what can the doctor do? Prescribe he must, otherwise he loses his professional character; and then, it often happens that the fancy of the patient actually turns the imaginary disease to that type for which the prescription has formerly been found or supposed to be a remedy.

But in all the varieties of the body, be they what they may, we can always understand that there are organic differences, whether the varieties be those of disease, or of the ordinary states of different individuals. We do not, however, ascribe genius to the body. We do indeed speak of a "painter's eye," the "touch" of a musician, or his "musical ear:" and we sometimes suppose that this "ear" is an obstacle to the learning of music as an art. But we never

suppose that the body, or any organ of the body, is possessed of genius: we look upon it only as the tool with which genius works. Even the phrenologists, who regard the cranium as the especial and immediate tool-chest of the mind, where the organs of all the propensities are arranged in order and ready for use, just as saws, planes, chisels, gimlets, and hammers are in a carpenter's box, do not go the length of saying that the propensities belong, as qualities of matter, to those particular portions of the brain which they describe as the organs of these propensities. They do not indeed take the different qualities—if different qualities there be—of those organs into account, but rest their conclusions on the mere size, which, in all other cases, has nothing to do with the qualities of matter.

Thus, though we must admit the existence of original differences in all the aptitudes of the body, we are unable to trace them to their sources, so as to be able to say in what they consist. But if we think of the mind, as mind, and not as body,—which last we are very apt to do without being aware of it,—we cannot even imagine an original difference between one mind and another. We cannot imagine any one particular in which one mind can originally differ from another. We know nothing of mind, farther than that it can acquire and retain knowledge,—the knowledge of the past, and apply that knowledge to the present. The very name MIND is not a substantive: it is a verb; and in all that we say or can say about mind, we speak of it as *action*, not as *substance*, just as we do of motion, of fire, of growth, or of any other species of action. "To mind," is "to remember" knowledge which was formerly *acquired*, and the verbal noun, "mind," is the general name of "the fact of remembering," and nothing more.

But this, though a conclusive argument against the pos-

sibility of one having any knowledge of original difference in mind, so as to be able to say, the one possesses genius, and another none, without regard to the way in which they have been exercised, is no argument against the existence of mind. We can have no idea of action which does not involve in it the necessity of two existences—something which acts, and something which is acted upon; and it is of no consequence to the necessity of this whether that which acts can or cannot be known to us, in any other way than by the fact of its acting.

The case of *fire* is one exactly in point. Before it was ascertained by experience that the heat and light, and other appearances to which we give the general name "fire," are nothing more than phenomena or displays, which accompany the action of certain material substances upon each other, the number of which substances, and the varieties of their action, are both much greater than was at first supposed, fire was considered as a material element; and even now there are not wanting, among those who are accounted philosophers, many who describe heat as a substance—"an imponderable fluid," which can be communicated from one portion of matter to another; and yet it is no more a substance than the knowledge which I have of yesterday, or the hope or fear that I have of to-morrow is a substance.

In the action of fire, or heat, there are differences; but they all depend on the nature of the substances in which they appear, and they seem to be, and probably are, perfect measures of the degree of action in every case; and we cannot say that there is any original difference in the heat itself. The heat which feels agreeable to the touch, that which melts lead, and that which burns platinum, are not three kinds of heat, they are only three degrees of it.

Thus far, all species of natural action agree with each other, and those organic changes in the organs of the body, which are occasioned by the immediate presence of external objects, or by internal affections of the organs themselves, and to which we give the name of sensations, or bodily feelings, form no exception: we never have a bodily sensation without the actual presence of an object causing it, any more than there can be fire or any other display of action in external nature, without the circumstances under which such action is produced.

But mind goes a step beyond this, in being capable of bringing back, or rather in receiving back, its former impressions, whether the subjects of these impressions are present to the senses or not; and there is no evidence that this is the case in any part of the material creation; for those cases of the conduct of animals which have sometimes been called instances of memory, present no trace of even the simplest of the purely mental affections, that of the return of knowledge in what we call mere memory, or simple suggestion. In all of them, there has been a present object of the senses: and all that we can say is, that similar affections of the senses of the animal are, if all other circumstances be the same, followed by similar actions of the animal; and were this not the case, the senses of the animal would really be of no use to it—would not be senses at all. But much depends upon the circumstances. Every animal, when excited, has a tendency either to attack or to fly from man, every other animal, and, indeed, every thing that is in motion; but even the lion himself, when gorged with food, is harmless to all the other inhabitants of the wilderness. There is no recorded action of an animal, even of those in which the record has been the most amplified by credulity, which may not be

accounted for by sensation alone, or which receives the slightest illustration from our supposing it to be in any sense mental; and indeed, if our knowledge of men were confined to that external perception of their actions which our senses give us, we could have no knowledge of the existence of mind in them. Savages watch the actions of each other probably with much more attention than sages do, and yet they never arrive at any knowledge, even of the existence of mind.

But savages are not without the evidences of the existence of mind, any more than men of the most extensive knowledge, and the most searching trains of thought. They must feel that they think of objects and events when these are not present to the senses; and as they can all communicate with each other by means of some kind of language, they all can consult with each other about an object or an event, though that object may never be seen afterwards, or though that event may never happen. We have this evidence repeated to us every day and every hour of our lives; and we can rarely converse with a human being, even for a few minutes, without allusion being made to some object or event which is not present; and every such allusion is an unanswerable proof of the existence of mind—of the fact of simple memory, or simple suggestion, if of no other.

But though the fact of the existence of mind is thus matter of every-day experience to all men, we have not a shadow of proof that there is, or of probability that there can be, any original difference between one mind and another; and this, not merely with regard to difference of genius—as of one man having a genius for the fine arts, another for the abstract sciences, and a third for the conducting of worldly matters, but with regard to genius in

general as opposed to the want of genius. Say that the particular turn which the genius takes is that of playing on the fiddle; admit that Paganini, or any other violinist, has been born with this genius; and mark what are the consequences. Either the embryo Paganini must have been well experienced in fiddles—and this, too, by means of the senses, before he had any sensation or any organ of sense; or it is an instinct, of the same kind with that of a sheep to eat grass, or a wolf to eat sheep; and Paganini is not musical because he is a man, but because he is a beast. There is no genius but in mind—in the memory of knowledge; and we must have *received* the knowledge before we can by possibility *remember it*.

The very idea of original genius, as belonging to some men and not to others, is therefore quite untenable—unless we take up the fancy of "*miraculous gifts;*" and to these genius and dulness, virtue and vice, have equal claims. The notion of original differences must therefore be given up as impossible and absurd, and we must look elsewhere for the causes of those variations which we find in many different individuals, in the readiness with which ideas are suggested, in the suggestion of certain trains of ideas rather than others, and in the whole nature and succession of the mental affections, whatever they may be.

The whole of the expressions which we make use of with regard to the differences of minds are demonstrations of this. We speak of the mind as enlarged or narrow, as liberal or illiberal, as expanded or confined, as noble or vulgar; and a great many other contrasts. But *to what is it* that we apply any of these, or any other epithet, whether simply, as descriptive of the character of one mind, or relatively, as descriptive of the difference between one mind and another? It is not to the mind itself, but to the ex-

tent and nature of the knowledge which the mind *displays;* and a mind which displays no knowledge is exactly the same to our perception as a mind which has none to display. If we take the verb "to remember," in its full extent, as including suggestions both simple and relative, and substitute it for the verbal name "mind," then all the epithets become adjectives, expressive of the extent and character of that which is remembered, whether we call it thoughts, ideas, or any thing else. Thus, "an enlarged mind,' means, "to remember largely,"—to have a large store of ideas; a "liberal mind" is "to remember liberal ideas;" and so of every other character of the mind. It is always of the knowledge which the mind recalls and displays that we speak; and for this very obvious reason, that there is nothing else of which we can speak.

How does the mind come by this knowledge? Solely by experience,—by our own observation, or by the instruction of others; and, as has been shown in a former section, this—how extensive soever it may ultimately become—must always begin with a simple bodily feeling, momentary in its duration, and wholly undefined, both in its nature and its locality. Our mind is literally "our own kingdom," naturally dependent on our own conduct, and the company which we keep; and its character, whatever that may be, is wholly of our own acquiring; and it is secure against those contingencies to which our bodily health and our worldly possessions are exposed. The age and country we live in, the persons with whom we associate, especially in our early years, and the habits which we acquire from their instruction and example, all have a powerful influence upon us; but we may overcome them all, and be mentally as great as we please. If we are not, the fault is our own, and we merit the degradation and punishment

which it brings. To say we have no genius for this matter, or for that, is a shallow subterfuge, and really means, that we have no will to it, that is, that we have not acquired that knowledge of the object or the means of obtaining it, and of our own ability to use these means, which would enable us to form that strong and ardent belief which brings on the emotion of action. *Esto quod audes*—"be what you dare," is a promise mentally given to the whole human race; but, in order to profit by this promise, we must "MIND" how we think and act—have such a mental knowledge of every intended step, and the means and way of taking it, as that we may always proceed with the certainty of success, in as far as it can be ascertained by human beings.

If the philosophy of mind taught us nothing but this, it would be well worthy of the time and labour which are requisite for the study of it, even though the amount of those were twice or twofold what it really is. But this is only a small portion of the benefit with which it is fraught; for it not only shows us what we may, can, and should do, but how we are to do it, not as a labour, but as the most pleasing occupation in which we can be engaged.

The observations which have just been made show that the facility of suggestion generally, and the suggestion of certain thoughts and trains of thought, which some minds possess more than others, depend wholly on the nature and extent of former thoughts, and not on any difference which exists originally between one mind and another; that they depend on the practice, or habit, or whatever name we may give to the whole train of thought, feeling, emotion, and action, from its very earliest beginning. On this succession of our conscious existence, the emotions and desires have a powerful influence, and so have our suc-

cesses and failures, in that which we purpose or undertake; and thus they form a subject of too complicated a nature for being properly discussed, as connected with simple suggestion only. Nor is it necessary so to consider them; for in those very instances in which they, at first thought, seem to be constitutional, they always, upon farther analysis, can be reduced to something connected with the thoughts, ideas, or states of mind themselves, which thus return most readily in suggestion.

The first circumstance which may be mentioned as tending to facilitate the recurrence of any thought in suggestion, is the time that the thought occupied the mind formerly, and the attention which it received, which, though perhaps not exactly the same, have yet a considerable similarity to each other. Mere length of time would not, of itself, cause the thought to make a strong impression, and, therefore, be more ready to return, because time, like space, is not a necessary element of thinking. But we cannot *dwell*, so to speak, upon a thought, without both consciousness and attention; and these cause us to regard it in various lights, and call in the aid of collateral thoughts, and also of emotions. In this respect, mental perception follows exactly the same law as sensation; for the longer we examine an object of sight, or listen to a sound, it returns the more readily and perfectly to the mind. Thoughts of which we are not conscious at the time, rarely, if ever, return in suggestion; and those which we pass lightly, are not easily recalled.

The peculiar nature of the thoughts, as they affect our emotions, and are found to be strongly connected with our weal or our woe, or indeed, in proportion as they have a powerful effect upon us in any way, are always much more ready to return than when their impression is more slight.

This is true, not only of the nature of the subjects of the thoughts, but of our own particular state when they make their first impressions upon us. What is new and strange, even if we have no personal interest in it, strikes us much more forcibly than that which is far more deeply interesting, if it happens to be more tame and common-place. The first sight of a town by one who has been born and lived for some time in a country of cottages,—the first view of the sea by one who has lived inland,—and the first view of a steam-engine, or even a wind-mill, by one who has previously had no knowledge of any thing but ploughs and carts, and the common domestic implements of rustic places, are never forgotten; and the first picture that is seen, or the first theatrical exhibition that is witnessed, is rivetted to the mind in such a way as never to be obliterated. The author of these pages must confess, however unphilosophic it may seem, that he has a much more lively impression of the rude cut of "the sparrow, with his bow and arrow," that "killed cock-robin," than of all the gems of the pictorial art that he has seen in after-life; and he must admit that the play of "The Stranger," which was the first which he ever witnessed, though neither the most talented nor the most moral of theatrical productions, made so powerful an impression as to render the stage quite unbearable ever since. It is true that Mrs. Siddons acted *Mrs. Haller* upon that occasion, and her son Henry *The Stranger*—of whose character he was a perfect embodyment; but, as there were no data for any comparison as of actor with actor, the magic of that enactment must have been its novelty.

The recent occurrence of the suggested thought is another means by which the suggestion of it is rendered much more ready. We remember the thoughts of the present

morning much better than we do those of yesterday, even though they are of a trivial nature; and if the sleep has been sound, and not protracted to those dozings and dreamings with which the indolent fatigue themselves far more in bed, than if they were up betimes and vigorously employed, we begin the day with "the head clear for thought," as it is expressed. There is much truth in this, and much advantage to be derived from it in practice. By the time that the evening of a long day, during which we have not been occupied in any one engrossing pursuit, comes round, we are incumbered with a number of petty thoughts,—thoughts of the simplest suggestion, which arise from the momentary feelings of the body, unconnected with each other, and thus unfit for becoming the elements of any train of thinking, which will keep the mind occupied, and allow the body to have a little repose. As these are unconnected, there is no analogy from them of which the mind can lay hold, so as to treasure them up; and thus the memory of them soon perishes. But their trivial and fleeting nature is the very cause of their crowding so much at the time; and though we cannot say that the mind is fatigued in the sense in which we apply that term to the body, yet it is bewildered by a constant succession of nothings, much in the same way as the eye is by the flakes during a snow-storm, or the flickerings of an *aurora borealis* in an autumnal night.

It is this invasion of the mind by little thoughts, which accumulate during the day, which drives mankind to evening amusement, and even evening dissipation. Their bodies are not fatigued enough for sleep, or the hour which custom has established has not arrived: they cannot get into a regular train of thought of their own; and the very same host of pigmy annoyances which prevent this, prevent the reading of a book, even if they have recourse to one.

If we are unable to get into a train of thought of our own, we cannot expect to enter into that of another. Hence, if the book is any thing more than the newspaper, or one of the other *confervæ* of the passing brook, which are produced by persons intellectually minded as we are then mooded, we cannot enter into the spirit of it; and thus it soon becomes "tedious dulness." If it is one of these, it only deepens the mental perplexity, and some artificial preparation for sleep becomes even more urgent than before. It has been said, by those who ought to know better, that this light reading, of which the mass has been greatly increased of late, has contributed to an increase of thinking, and to a lessening of evening dissipation. But the natural and necessary tendency of it is exactly the opposite. It increases the mob of unconnected and unmeaning thoughts, the annoyance of which is the grand cause which drives men to the use of intoxicating liquors; and whoever chooses to examine this age, in any one class of society, and compare it with former ages, will find that the facts bear out and establish the principle.

When sleep is obtained in a natural way, the idle thoughts which had accumulated during the preceding day are gone by the morning, and those of a more permanent and useful character are left free to come in suggestion, and be our guides to the right performance of the labours of the day. But when artificial means are resorted to, either for the purpose of "killing the time" till the body is wearied, or by drugging that to an artificial repose, the same clearing of the mind is not obtained; for, on the contrary, it is apt to be more clouded than ever; and this is the reason why habits of dissipation grow so fast and become so inveterate,—why the habitual attendant upon amusements soon becomes a trifler, the habitual drinker a

sot, and the habitual gambler a wretch fit for any crime. Even in the full tone, both of the body and the mind, man is but ill able to contend with the strange but strong fascination of these vices; and, therefore, he must be less so when the system is unhinged, as it always is by the accumulation of these trifling and unconnected thoughts.

Closely connected with this subject is that return in old age of the thoughts of our early youth to which the names of "second childhood" and "dotage" are often given. This begins to show itself, before the body wholly loses its faculty of obedience and the remnant of the man actually forgets what it is doing. But even the recent thoughts are sooner forgotten than equally trivial ones are in middle life; and this shows that there is a weakening of the present impressions, so that they are able to call up only those thoughts by which the mind was strongly affected on their first occurrence. There are no impressions stamped so indelibly on the minds of ordinary men as those of their youth; even the loves of opening manhood, which might physiologically be considered as the most powerful of any, vanish from the recollection before the sports of the boy, which, by the way, is a proof, where we would little expect it, that our physical system is the governed part of our nature, and not the governing.

Very many circumstances might be named, all tending to modify both the readiness and the vivacity with which thoughts come back to the mind—so strongly in some instances as to affect the body in the same way as if they were produced by present realities; and upon one or another of these might be explained many of those supposed powers of mind generally, and of the minds of particular classes and individuals, to which names are given, could be explained. But there are very few of these that can be said to belong

to mere suggestion in its very simplest form, as there are always some feelings of relation which are blended with them; and it is to those feelings of relation that they owe the greater part of those characters by which they are distinguished from each other as states of the mind, and not with reference to those real subjects of which they are the mental representations.

We must treat of the states or feelings of the mind, whether we regard them as affections, having causes in the objects of sense or in the suggestions which the mind brings back, or as emotions of the mind itself consequent upon these, as we treat of the organs and parts of the body, —that is, we must dissect or analyse them, so that we may understand each of them singly, as the means of arriving at the knowledge of the results which are produced by their acting together. But we can use no material instrument in our mental analysis, as we can do in our anatomical dissections. There is no scalpel by the help of which we can divide feeling from feeling, or the parts of a compound feeling from each other, as we can divide bones and muscles, and separate the fibres of a muscle from each other. Our analysis must be wholly virtual—understood, but not performed; and while we speak of the compound causes which enter into the part of the production of any feeling, the feeling itself remains all the while entire and undivided.

It is with reference to a virtual analysis of this kind that we use the term Simple Suggestion, as expressive of the fact of the mere return of a simple and single thought to the memory. But though we do this, and find a great help to the weakness of our perception by so doing, there may not actually be any such feeling as that of simple suggestion in the whole range and history of mental ac-

tivity. We must not wonder at this, or suppose that our virtual analysis of the mind is less accurate, less philosophical, or less useful, than our real dissection of the body. We dissect out a bone, for instance, or the structure of a joint, in order that we may be better able to set the bone in case of fracture, and replace the joint in case of dislocation. But, notwithstanding this, there neither is nor can there possibly be any single bone or joint as a separate production of nature. There may be a body born without a limb, but, among all the deviations of nature from its usual course, the causes of which are often so puzzling to us, there is never any such thing as a limb born without a body. Just so, in the case of mind, we endeavour to analyse the thought which leads to a certain result, in order to find out the particular parts or circumstances in the thought upon which the result depends, for the purpose of obtaining or avoiding a recurrence of that result, as the case may be; and we may use means for this purpose which have no connexion either with the subject from which we set out, or the object at which we arrive, just as, in walking from Charing Cross to Temple Bar, the steps which carry us from the one to the other have nothing to do with those places.

There is scarcely any mental state which can be considered as a purely simple suggestion; for the very earliest act of the infant mind is the discovery of a relation— the resemblance or the difference of two feelings, so instantly consecutive — so very nearly co-existent, that the mental perception of the one cannot pass away before that of the other is received. This is in itself but little different from the connexion of sensation and instinct in those animals which have the organization and the organs of sense most nearly resembling those of man; and, if it is not accom-

panied by the consciousness of continued existence or identity, it passes away in like manner, and never returns.

We have already taken occasion to notice that, in cases of mental absence, whether arising from the mind being occupied by a train of intense thought, or from its being unaffected by the impressions made upon the body, actions are performed of which we never have the slightest consciousness; and such actions are, in truth, not more mental than those of animals. For the performance of those functions which are essential to the mere preservation of its animal existence, the human body is provided as well as the bodies of other animals; and where action follows sensation instantly and without any act of the mind, man plays the animal as completely and exclusively as though he were not possessed of any mind at all. Every man thus plays the animal in many of the more trivial of his actions; and there are some men with whom it is the rule of action, and the actions in which there is a mental part form the exceptions. The animal instincts of man do not, however, extend to the whole sum of his impulses, as they do in creatures which have no mind: and, therefore, persons who have acquired the habit of acting much upon animal impulses, or whose minds are so ill-informed as that they cannot act upon the dictates of those, are always getting into error, and suffering from not minding what they are about.

Since it thus appears that we can have no mental state or affection worthy of the name, without there being a relation between at least two feelings embodied along with it in some way or other, we cannot apply the doctrine of perfectly simple suggestion to the explanation or guidance of our conduct, or to the investigation of the complete laws by which that conduct is governed. In order to ac-

complish this, we must take the laws or circumstances of relative suggestion along with us, as this and simple suggestion are always blended with each other when we decide and act rationally, or "mind" what we are intending or doing.

When a feeling,—excited in whole or in part by the presence of an immediate object of the senses, producing that organic change which we call bodily sensation,—suggests a former thought or state of the mind, there is always a simple suggestion blended with the affection, though accompanied also by a relational one. But when one mental state suggests another, as is the case in all the higher or more purely intellectual affections, the whole case may be considered as relational, and simple suggestion may be said to have no concern.

There are thus four species of states in man, any of which may be followed by emotion and action. First, there is the merely animal state, in which we are quite unconscious of what we are doing,—the state in which we have "no mind" at the time, and no memory afterwards. For our actions in this state, we can scarcely be said to be morally accountable; but we are morally accountable for being in such a state, unless when it is the result of disease in the system; and, in all cases, we must bear both the physical and the intellectual consequences. Nor should we omit to bear in mind, that our utter unconsciousness of our conduct at the time, is no security against the future impressions upon the mind, even after unheeded thought. Some subsequent thought may bring it to the mind; for while we are in the body, and capable of observing and acting, the relations which exist among the objects of the senses may bring to mind that of which we were quite unconscious at the time; and the knowledge even of a neglected moment, being brought home in this way, may

"bite as a serpent, and sting as an adder." The fact is, that if we do not "mind"—do not take the mind along with us in all that we do, we have no security against that punishment which is the proper retribution for our thus neglecting the best bounty of our Creator. We never can tell, after the lapse of even a very short time, whether we were or were not conscious at the time of performance of those actions which make but slight impressions, and which pass away, as do many of our unconnected thoughts and actions, perhaps in every day of our lives; and yet, if the consciousness has been ever so slight, there may come some future state of the mind sufficiently powerful to call it back as forcibly as though it had made a deep impression at the time when it occurred. Thus, if the mind is neglected, it may be made to feel for the neglect.

Secondly, there are cases in which we are simply conscious of what we are doing; but in which the simple consciousness does not produce any other mental state; and these are they which approach most nearly to cases of simple suggestion; and such states do not return unless there be something powerfully impressive in these states which bring them back, and an object of the senses is invariably necessary in those suggesting states.

Thirdly, there are cases in which there is the presence of an object of the senses in the suggested state; but in which the fact of suggestion turns more upon relations than upon the more simple fact of the former consciousness of the state. In these, simple and relative suggestion may be said to be combined, with nearly equal power, and they may be in so far followed by a mental sensation as not to have reference entirely to the gratification of any of the wants of the body, which are the only results which naturally belong to the first and second classes.

When all the motives of action belong to the first of these classes, the individual, or the nation, as it happens, may be regarded as in the very lowest condition of human nature,—the one which is the least elevated above that of ths beasts; and, in this condition, man is most pitiable and helpless, though he feels it much less than those who have alternate fits of this degradation, with more mental ones between. The second class marks the infancy of society, in which the passions have still the principal dominion, but in which there is more resource, and generally also more cunning and cruelty, than there is in the perfectly abject. At this stage, the bow is bent, the spear is pointed, and the fishing hook is contrived; but man is still a houseless wanderer, and the only "craft" which he makes use of in crossing the water is a single log, untouched with any tool, such as is seen on some of the coasts of New Holland. The third class includes men in those states in which they may be said to be awaked, but not cultivated — that is, they live in society without one family or small sept being in a state of constant hostility with another; and they have habitations and clothing in accordance with the climate, and various rude tools and implements to assist the hand in the performance of labour. In general, too, nations and individuals, at this stage of advancement in civilization, have not a little of the poetical character, and they are prone to mythology and superstition. They are capable of carrying on trains of thought; but these always have reference to objects of the senses; and even in the feelings of Deity, and other matters which have no real object that they can perceive, they imagine to themselves sensible representations of the feeling. Their natural language is impassioned and figurative, full of metaphors and personifications, though they deal but little in similes, and those other

more artificial figures of speech which characterize the poetry and the impassioned prose of more advanced states of society.

While men, in this stage of developement, are prone to address all objects, animate or inanimate, as if they could understand language, they are equally prone to people all nature with imaginary divinities, and to refer every thing that they do not understand to the immediate agency of these. It was at this stage that mankind imagined all the systems of mythology, whether of gods, or demigods, or of other spirits, of which the annals of our race afford so many examples; and any one who chooses to examine these, and also the physical characters of the countries in which they had their origin, will find that the mythology is really an embodiment of the more remarkable phenomena of nature, and that, up to a certain stage, the gods, demigods, and spirits, were multiplied in the exact proportion as the observation of nature extended, and the pursuits of men became more varied.

The cause of this was, and is, evidently, incapacity for generalization. The detached links of the chain of causes and effects were seen; but the connexion was a matter which called for a more purely mental effort than men in this state were capable of making. Persons of this description are to be met with in all states of society, from that in which civilization has just begun, to that in which it has reached the very highest degree with which we are acquainted; and in civilized countries they probably form the great majority of the population, only, as the spoken and written opinions in each society are taken from those who have more enlarged and intellectual conceptions of things, the idolatries of the multitude are not so easily seen as they are when society contains no members more intel-

lectual than themselves. It may be humiliating, and may sound harsh, but it is nevertheless true, that the great majority of the people of England—of every country—are idolators. Not that they all set up images of substantive matter, and pay divine honours to them; but, when one removes the gloss of speech—the mere words which they have conned by rote, one finds that their notions of the spiritual world, of the human mind, of intermediate spirits, and of the Almighty himself, are all material,—that each and all of these are really embodied,—have shapes in which they can appear, and local habitations. Their minds are awakened, but they are still in the dim light of the grey dawn. They cannot proceed without the body, and that clothes with the flesh every conception that they are capable of forming. This state of the mind is perfectly consistent with the mechanical rudiments of education, the arts of reading and writing—and indeed with any extent of nominal or external education, so long as that education is mechanical, which is very much the case with all school education, whatever may be its name and reputation in the world.

It is, indeed, gravely to be doubted whether any description of education can be so framed as that we shall be certain of its producing a mental effect. That it *must* produce such an effect is contrary to theory, and it is also disproved by the facts; for it may with confidence be said that, of those who receive the very highest nominal education which the country can afford, not one in ten is really an intellectual character; and thus, the minority, who do acquire this character, must be regarded as acquiring it by some other means. That they do this is proved by the fact of the number of men who have arrived at no mean degree of intellectual celebrity with very little scholastic education.

These last are what are commonly, but very incorrectly, termed "natural geniuses;" and that they bear a much smaller proportion to the whole of the "naturals" than the "learned geniuses" do to the whole of the "learned," is an argument in favour of education, as giving facilities for thought, which those who have not the advantages of education have far more labour in obtaining. The advantage of education in "putting people in the way of becoming intellectual," is farther proved by the fact, that in proportion as education, of whatever kind, and in whatever manner, becomes more extended, the relative number of those "natural geniuses" becomes fewer, and the celebrity which they acquire becomes less,—they come down from that demi-godhead to which they are raised in ages of general ignorance, and take their place among ordinary mortals.

But, notwithstanding these advantages of education—and they are unquestionably of no mean value, there is not any thing immediately intellectual in the mere process of educating, be the subject of that education what it may. Whatever may be the nature and object of the lesson, it is nothing but an address to the senses, in the same manner as the sights and the sounds of external nature; and of itself it is not absolutely certain of reaching the mind and awakening it to its higher senses in any way that differs in kind from the common influence of the objects of sense in those cases in which we have no teachers. The mind must be prepared for the lessons of the teacher by previous communication with the body upon those subjects which affect our senses without any training by others. How soon this may be begun, is not a matter which even the parties themselves can very easily determine; for there are probably none of us that can remember our first thought, or the first time that an affection of any of our senses was

followed by a desire to know the object that affected us; and yet it is obvious that we have this desire before we can profit by any lesson, in such a manner as that it shall give us even the simplest train of mental occupation that can go on without the present stimulus of external objects.

At all events, it is quite evident that the desire of the gratification of none of our bodily appetites can originate this intellectual part of our existence. The animals have appetites as keen as any of our bodily ones, and probably not very different in character. These are their only stimuli to action; and among them are to be found many sensations that are desired by them as pleasurable or avoided as painful, to which we do not usually give the name of appetites. Thus, for instance, animals feel pleasure in activity and in repose, when neither the one nor the other can in any way contribute to the finding of their food, which is the grand animal work, in so far as the individual is concerned. They are also similarly affected by difference of temperature and of light, by the hygrometrical states of the atmosphere, and by some of the other general influences of nature, of which we have but little understanding. They are, indeed, much more sensitive to these general influences than we are, because they belong wholly to the system of material nature, and must, in consequence, be under the guidance of its laws, and of them only. We, on the other hand, are, in so far as we are mental, elevated above the contingencies of those laws, or, which is the same in effect, we are exempted from their operation, in all those thoughts and trains of thought which we carry on without any reference to immediate objects of the senses.

In those states which are the peculiar province and privilege of man as an intellectual being, we are actually independent not only of the external world but of our own

bodies. We have, as it were, an independent existence which, for the time, gives us such a status in creation, as that we are connected with, or immediately dependent upon no other part of it,—which we never are when the body, or any of its sensations, enters into or is connected with even our consciousness.

The body does not, even in the slightest degree, partake in this independence. It cannot live long without some supply of food, scarcely a moment without the direct performance of the act of respiration, and not for one instant without the direct performance of some of the functions of life. So far as we can judge, this is the case with every member of the material creation. They are all tied to the earth, by the very laws of their being; and if the ties are once completely severed, they can never again be restored; for, the very instant that the plant or the animal ceases to be under the law of its nature which makes it one species and not another, it is under the dominion of the general laws of nature, and has no law and no existence of its own, whatever may have been its nature, its locality, its element, or the degree of sensation or activity with which it was endowed. The form and the merely material substance remain for a time without much change which we can perceive, but the life which showed itself in that substance is gone, and not all the powers of created nature can bring it back.

The human body, and also the bodies of all animals and vegetables, are thus constantly and inseparably under subjection to the laws of the material universe,—to one branch of those laws in respect of the substance of which they consist, and to another as respects their specific character and action. In so far as they are under the first of these, they are objects of our senses in the co-existence of their

parts, and the forms and textures of those parts; but in so far as they are under the latter, there are no co-existent parts of which our senses can take cognizance; and we have evidence of the existence of life only in the successive phenomena of the living subject. But, as these phenomena are never displayed unless through the instrumentality of the substance of the body, and never through these, unless when the body is in its natural connexion with the rest of nature, we cannot even imagine this action to have any separate existence, any more than the action of fire can have separate existence when there is nothing to burn, or the action of light when there is nothing that it can reveal.

But, the simple fact of our being able to exist in thought, at any time or in any place, within the range of our knowledge, without the presence of any subject of that knowledge, is demonstrative evidence that there is in us a power or principle of action, which is equally independent of the sensations of our own bodies, and of all the material creation, whether viewed as under the laws of substance or those of action.

In this independent action of the mind, while the body is in life, there are very great differences in different individuals; and though all these differences are acquired, yet the means and the mode of acquiring them are so many, that it is not easy, perhaps not possible, to reduce them to classes in such a way as that they can be made subjects of rational communication between one human being and another. Probably none who have had any experience in the exercise of the senses, and certainly none who have acquired the use of language, are wholly without these mental states; for, upon seeing any object, there must be a mental process,—a suggestion, however simple,—before we can either pronounce its name, or indicate by any sign,

however slight, that it is known or unknown. Even the wonder which an infant expresses at the sight of any novelty, indicates a much more extensive range of thought than one who has not reflected on the subject would be apt to suppose.

This feeling of novelty is, indeed, a far more intellectual matter than the simple recognition of that which has been previously known. In the case of the known object, there is but one suggestion; but in that of the novel one, the mind must glance over the whole range of its knowledge, before the conclusion as to whether the object is or is not new, be arrived at. In very early life, when the quantity of acquired knowledge is limited, the range of the mind in ascertaining the fact of what is new and what is not, is of course limited; but after there has been a great deal of knowledge accumulated, the perception of real novelty is not so easily arrived at, and we are frequently unable to identify things which are not new, especially when they have not come frequently or recently under our observation; and the difficulty which we have in doing this, increases as our senses get weakened, and our whole frame begins to decay in old age.

The more lively mental impression that we have of novelty, or, what in fact amounts to the same, the greater mental effort which it requires, though an obvious and necessary law of our nature, is a very beautiful one, and it works admirably for our advantage, if we do not carry it to excess, and convert that into an ultimate object which, in itself, is only a means of attaining the real object for which the means are given to us. The mental effort which has to be made in order to ascertain the simple fact of novelty, prepares us for the ready and thorough examination of the new subject, the instant that that fact is ascertained;

and were it not for this, our progress in the extending of our knowledge would be comparatively slow.

The extreme interest which children take in every thing new is, in itself, abundant proof of this; and the propensity is so very valuable that, though it stands in need of constant direction, it ought upon no account to be repressed; and the suppression of it is the reason why so many of our race stop short in the path of knowledge at so very early a period of life, and, from being active and inquiring boys, fall into the rut of mere custom, and never arrive at the character of intelligent men—men capable of forming independent judgments and rational opinions.

Some portion of this intellectual power and capacity belong even to the humblest of our kind, for there are none who have not some perception of what is new and what is not; but it is only by continued habit that this power of thought can become the leading feature of the character, and arrive at what may be considered as the fourth and most elevated of those states or classes into which, as we have said, mankind may be in so far arranged, in order that by the study of them we may facilitate our general knowledge of mind and its phenomena.

This highest class of mind, which, however, comprehends minds of an endless variety of capacities both in the extent and the subjects of their knowledge, is that in which a continued train of thought can be carried on without any immediate appeal to the external world by means of the senses of the body. It must, however, be understood that the distinctions which we in this way make between mind and mind are relative and not absolute—that they are not made with reference to any differences which there are or can be between mind and mind, in their abstract nature—of which nature we really know nothing—but merely of

the extent of knowledge and of the manner in which that knowledge is used. When we say of a man that he is "mindless," we do not speak of the absence of mind as a portion of his nature, but merely that the mind of which we admit him to be possessed, does not in any way show itself to us by means of its knowledge. The abstract gift is to the foolish as well as the wise, and to the indolent with the same original capacity as to the active,—only the one class "bury it in the earth,"—in the miry clay of the bodily appetites and passions, and the other lay it out to use and profit; and, according as it is neglected or used, and also according to the kind of use which is made of it, it must bear the consequences, be these what they may.

SECTION XIII.

RELATIVE SUGGESTION.

EVERY mental state, which is not immediately consequent upon some affection of the senses, and which has not advanced so far as to become an emotion, or motive of action, or of purpose or resolution to act, is, in truth, a *relative* suggestion; for the mental state, whatever it may be, must bear "relation" to some cause, either external of the mind or in the mind itself. Thus, in every mental affection, by what name soever we may choose to call it, there is always a relation either to present information or to a former mental state, which former state may in all cases be so analyzed as that the primary form of it, however that may differ from that which is suggested, will be found to be matter of external perception; or, if it is a combination formed by the mind itself in thought, it can always be resolved into elements originally obtained from without.

The mind, in fact, knows, and can know, nothing of the essence of material existences, or, in fact, of existences of any kind. There is some way in which the human body makes known its sensations to the mind, and in which the mind makes the body obey in return emotions the objects of which are wholly mental, and which, instead of conducing to the comfort of the body, have in many instances the very opposite effect, not only in the restraining of those

desires which, though immediately gratifying to the sense, would ultimately produce painful or unpleasant consequences, but in matters wherein the body is a sufferer from first to last. But this is a peculiar case, existing only in the connexion between the body and mind of the individual, and not capable of illustration by means of any thing that we can observe or subject to experiment, external of the system of our own compound nature, of the working of which system we can know very little, and respecting which it therefore behoves us to speak with the utmost caution.

In no other case, excepting those very indefinite and peculiar ones of which we have no knowledge further than that of the simple fact that they do exist, we cannot imagine any reciprocity of action between mind and matter, or any action of the one upon the other, of any kind or to any extent whatsoever. When we merely think of any portion of matter by which the senses are not at the time affected, it is not necessary that the matter thought of should then exist, or ever should have existed. We can think of the space which the solar system occupies as being filled as far as the circumference of the orbit of Herschel, or as much farther as we can name or imagine,—as being filled by a globe of solid gold or of any other matter which we please, with the very same ease and facility as we think of the bodies of the solar system, in the state in which they actually exist; and we can just as easily think of the times and the men before the invasion of Britain by Julius Cæsar, or of those before the Flood, as we can of the passing hour, and of the men who are now actually in our sight. So also, conversely, in the case of matter when it makes an impression on our senses, our emotions do not necessarily alter or in any way affect the condition of that matter,

and much less can the mind affect it, any more than be directly affected by it. Mentally we have no direct knowledge of its being present or absent, or even of its having any existence. We are wholly dependent on the sensations of the body for this portion of our information.

There therefore remains nothing respecting matter that the mind can know excepting its relations; and all the information which the mind can receive from the body upon the subject is resolvable into these. But if this be, as it clearly must be, the case with matter, much more must it be the case with thoughts or previous states of the mind which return in suggestion. Whether they are "brought to mind" by the actual presence of objects of the senses, or by thoughts without any object of sense, there are no means by which they can come to mind but relations. All suggestion is, therefore, relative; and when we make the distinction we do it only in order that, by a sort of virtual analysis, we may make the subjects of our thoughts and the phenomena of our thinking more easily understood, than it is when we attempt to explain at once the whole of the compound process.

The perception of relations is thus the proper function of mind, and as such it belongs to man only of all the members of the terrestrial creation. It is true that the females of many animals, and those of animals not in other respects the most sagacious—as of the common sheep for instance, know their own young, and animals which pair know their mates during the pairing time. But these "knowledges," if we may use the term, are merely modifications of the sense, and last no longer than the physiological necessities which they are adapted to answer. They are not founded on any relation which the animal is capable of perceiving, and they never take place except when

they can be immediately referred to the senses. Animals and plants have their organizations fitted for the supplying of their wants during the period of their lives in the same manner and nearly on the same principles as water finds its level by gravitation, and is solid at one temperature, liquid at another, and converted into steam at a third; and when the circumstances in which they are placed change, they lose all knowledge of the old, and fall entirely into the new.

Relations are so very numerous and varied that they do not admit of any general definition; and yet they are the only means which we have of acquiring knowledge,—the knowledge of our own existence,—the knowledge of our own bodies, of the objects of the external world, of every thing that we can name; and but for them, we could neither plan nor execute. The discovery of relations is indeed *the* act of mind, the criterion and proof of its existence; and the extent to which the mind may proceed in the knowledge of them is absolutely without limit.

Like most of the other states of the mind, the fact of our being able to acquire the knowledge of relations has been fancied to be a separate power or faculty of the mind, and as such it has been attempted to be described under the name of *Comparison*.

The word "comparison" is, however, not the name of a power or faculty of any kind, but of an action. It literally means "to pair with"—to place together side by side or in juxtaposition in some way or other. The subjects which are thus compared are parts of a compound; and the mere fact of placing either things themselves, or our mental conceptions or ideas of them, together, is not in itself completing any useful process. Hence the comparison is always made with some purpose. That something is to result from it is involved in the meaning of the word "com-

parison;" for it is formed from the verb *paro* — πειρω, "to contrive or try"—which signifies, not complete action but the mere beginning of it. A comparison is a trial; and the judgment which we come to upon that trial is a relation, and may be valid or not according to the evidence. If the case is one of the immediate perception of the senses, we are enabled at once to come to a rude judgment in very many cases; but there are others in which we are not able to do this, even when the subjects compared are present to the senses; and in these we must find evidence before we can decide, and our decision will be correct in as far as we are in possession of the proper evidence and use it aright.

In our judgments founded on comparisons of objects of the senses, much depends upon the education of the particular sense,—and this education is the experience which it has had, and the number of suggestions which the wish consequent upon the exercise of it can call up. Thus, the education of the senses is really a mental process, though the extent to which this education can be carried must of course depend on the fitness of the organ to obey the mental emotion.

A simple case will illustrate this: any person who sees a line drawn any where can at once say whether it is long or short, straight or crooked; yet, in this there is a comparison; for unless there were a mental standard, obtained by former experience, no decision could be made; and we shall see that the correctness of the judgment, even in these cases, depends upon the education of the eye—the accuracy of the mental standard. Absolute correctness cannot be reached by any education of the organs and the mind in connexion with them; but a person who has had much and careful practice in the measuring of lines, will be able to

"guess" very nearly at the length of a line, in inches or any other known measures, and also to say whether a line is or is not "very nearly" straight. One who never saw the length which we call an inch marked out could not state what relation any line that might happen to be shown to him had to an inch; and one who had not previously learned the meaning of "straight" and "crooked," and also to know them at sight, could not say that any line had more relation to the one of them than to the other. A parabola, which is one definite species of line, is much more easily understood than a line or a curve or crooked line generally; and yet, if you draw a stroke on paper, a person who is totally ignorant of geometry will not be able to decide whether that stroke is or is not a parabola. But one who is familiar with all the Conic Sections, or curve lines formed by the position of a plane intersecting the curved surface of a cone, from the triangle, formed by cutting it downwards through the middle, to the circle, obtained by cutting it straight across, will at once distinguish all the five species of figures which result from the positions of the section, and tell from the mere bending of the line whether it is or is not the parabola, or middle figure of the five—the one which is intermediate between the ellipse and the hyberbola.

Not only this, but if the party really knows the subject, and has not merely "conned by rote," that is, learned in the succession of their mere sounds, words concerning it, he will be able to make the comparison in his own mind, and describe the peculiarities of the curve in such a way as that any one who has been in the habit of attending to instruction, or following out his own observations in trains of thought, will be able to understand the meaning.

In order to show the paramount nature of the knowledge

of relations, and also of carrying on a mental train of thought, let us examine this case for a little. We pretend to no great depth of geometry, or power of description; but so much the better; and thus let us try: Take a piece of paper, draw a pretty large circle upon it, and cut all without the circle carefully away. Then cut out a sector, or portion of the circle, by two straight lines from the centre to the boundary. Next, take either the piece cut out or the portion left, bring the two straight edges of it into contact the whole way, taking care that it is every where equally bent, and you have the curved surface of a cone. There are some curious relations between the two conic surfaces, which can be thus made out of the same circle; but with these we have no concern in the mean time.

Paste or gum a small strip of paper so as to keep the two straight edges in contact; and, if the paper is equally bent all round, the cone will stand erect on a circular base. Set it on the table before you, examine it, and see what would be the forms of the sections, if you were to cut it in two by a plane or perfectly straight cut, in every direction that you can imagine.

First, let it be cut through the top downwards, either through the middle of the base or not, and the section of the curved surface would give two sides of a triangle, and their distance apart at the base the third side. If this cut through the vertex or top of the cone is perpendicular, it will pass through the middle of the base, and the section will be the largest triangle that can be cut out of the same cone, as the third side will be the diameter of the base. In proportion as the cut passes farther from the middle of the base, the third side of the triangle will become shorter, and the triangle less in every thing but the two equal

sides; and if the plane just touch the curve surface all the way without cutting it, the triangle will vanish into a straight line; and it will do this in which way soever the section or plane may slope. It is also evident that no triangle can be obtained but by making the plane of the cut or section pass through the top of the cone, but that every section thus obtained must be a triangle, and also that no section of a cone can be a triangle unless it does pass through the vertex or point of the cone.

Secondly, let the section or cut be parallel to the base of the cone, and, at whatever height it is situated, it will form a circle with the curve surface of the cone, the circles so formed becoming smaller as the section is nearer the top, and vanishing into a point at the top itself.

These two sections are the limits, the first vanishing into a straight line, and the second into a point.

There are only other two general directions in which the cone can be cut in two, namely, perpendicularly downwards, not through the vertex, and obliquely across. The first of these agrees in one particular with the section through the vertex which forms the largest triangle, and divides the curve surface, the base, and the whole cone into two equal parts. The planes of the sections are parallel, and the one is parallel to, and the other coincides with, the axis of the cone; that is, with a line joining the vertex or top and the centre of the base.

These perpendicular sections not through the vertex form hyperbolas, which begin at the triangle formed by the perpendicular section through the vertex and centre of the base, and they become smaller and flatter as they recede from this triangle, until the base itself is arrived at, and then they vanish in a point of the circumference. The *loci*, or places, of the vertices, or highest points, of all these

hyperbolas, of which there may, in every case, be an unlimited number on each side of the central triangle, and which are every way equal to each other when at equal distances from it, are in the slanting side of the cone, answering to the axis or central line of each; and thus they form, upon each side, an infinite variety, or series, of figures of the same species, beginning at the triangle but not including it, and vanishing at the point in the base. In all cases they have certain relations to the triangle; and in the case of any of them we have only to imagine that the cone is continued far enough downwards, in order that the base of the hyperbola may differ from that of the triangle by a quantity smaller than any that we can name or measure, though in no case can the base of the hyperbola, in the same cone, be equal to that of the triangle which divides the base, the curve surface, and the cone, into two equal parts.

There are some curious and very important relations between lines drawn from points in the side of the triangle perpendicular to that, parallel to each other, and meeting the curve of the hyperbola, and the portions of the side intersected between them; and these relations contain the foundation of the doctrine of *logarithms*, which has tended so much to shorten and simplify the business of calculation; but we shall not enter into the particulars of them.

These hyperbolas form the third species of sections obtained by the cutting or supposed cutting of the cone, by a plane or perfectly flat section, namely, the section which is parallel to the axis of the cone, but does not pass through the vertex or point.

There can be only one other general section—that which cuts the cone obliquely, without passing through the vertex; but this may have two positions,—one in which

it cuts both slanting sides of the cone, or the cone produced, and another in which it cuts only one of them; and these form, by their division of the curve surface, the fourth and fifth species of sections of the cone.

Fourthly, If the section is oblique, both to the axis and the slanting side of the cone, it will meet and cut both the slanting sides, if the cone is supposed to be continued far enough; and whether this continuation is made or not, it is quite evident that the part of the section contained within the cone will have exactly the same form.

Suppose that the cone, or its continuation, is sufficient for the complete section; then, as that section meets the slanting sides in its two opposite points, it must have its opposite extremities similar and symmetrical — the one turned the opposite way to the other. It is an *ellipse*, and in the same cone we can imagine an endless number of ellipses in their forms and also in their sizes, if the cone is supposed to be continued far enough. They begin at the circle, where the section is at right angles to the axis or parallel to the base of the cone; and, as the obliquity to the base increases, and the one end of the section approaches the vertex or point of the cone, the ellipse becomes longer and narrower, until the vertex is arrived at, and there it vanishes into a straight line if its plane is parallel to the slanting side of the cone, and into a point if it is not.

The vanishing into a straight line—into the sloping side of the cone—can take place only in one position of the plane of the section which forms the ellipse, namely, when that plane comes to the vertex of the cone in a position parallel to the slanting side; for in any other position the ellipse is thrown out of the cone, when the section reaches the vertex, and thus it vanishes into a point. The ellipse, therefore, considered as a section of the cone, has all

varieties of form, from the smallest deviation from a circle, to the nearest approximation to a straight line; and in its size it is any thing intermediate between any circle that can be named and a small point which has no extension, and at which it vanishes.

Fifthly, That position of the oblique section, in which it is parallel to one of the slanting sides of the cone, can never be an ellipse, because it can never meet the side to which it is parallel, until it comes to coincide entirely with it; and then it is not an ellipse at all, or any figure inclosing a portion of surface having length and breadth, but merely a straight line, extending as far as the slanting side of the cone, which may be indefinitely long. Hence, we have another species of section, differing from all the four which have been mentioned; and this is the *parabola*, intermediate between the hyperbola and the ellipse, more uniform in its curvature than the hyperbola, but less so than the ellipse.

Of these five species of sections of the cone, there may be varieties absolutely without end, both in form and in size, and that, too, out of the very same cone. But the cone itself may vary as much as any of the sections, that is, there is really no end to the variety either of size or of relative form that it may have. The circle out of the part of which we have supposed it to be formed, may be actually made of a vast number of sizes, and it may be imagined of any size whatever, whether great or small—ten millions of miles, or the ten-millionth part of a hair's breadth, or any thing greater than the first of these or less than the second. The magnitude of the circle determines the length of the sloping side of the cone; but there is another dimension of which we have the same indefinite range of choice—the portion of that circle of which we make use. The entire

circle cannot be formed into a cone at all; for it is merely a plane or flat surface. Thus it is the limit of the cone the one way; and the limit the other way is a straight line, the length of the sloping side, which is equal to the radius or half diameter of the circle from a portion of which the curve surface of the cone is formed. If the nearest possible approach to the whole circle is taken, the base of the cone will not deviate much from the original circle, and the elevation of it will be barely perceptible; and, on the other hand, if the smallest possible sector of the circle is employed, the cone will have scarcely any perceptible base, while the axis or altitude of it will not sensibly differ from the length of the slanting side—which side, in that case, will have very little slant.

The ultimate limits of these innumerable cones, which may be formed out of the very same circular surface, by merely varying the extent of the sector of which they are formed, are thus, the flat disc equal to the circle, and the straight line equal to the radius or half diameter of that circle. Exactly midway between these limits, there is a cone of peculiar form, connected with which there are some relations worth attending to. If the circle of paper is cut exactly across the middle, or into two semicircles, each of these contains half the surface of the original circle, and half its circumference in the round side; and if this semicircle is formed into a cone in the manner which has been described, the diameter of the base of this cone will be exactly equal in length to the sloping side, and the triangle formed by a perpendicular section of it through the vertex will have all its three sides equal to each other.

The equilateral triangle, or triangle of three equal sides, which is obtained by the cutting of this cone through the middle, is the simplest of all figures which are bounded by

straight lines; and, if we inclose the base of the cone in another triangle of three equal sides, take three equal balls that shall touch the sides of this triangle two and two, and place a fourth on the top, we shall have the most simple and perfect of all the elementary shapes into which substances arrange themselves when they form crystals.

The triangle with three equal sides is the simplest or most elementary of all figures which are bounded by straight lines; and the figure bounded by four equal triangular sides — the *tetrahædron*, or "four sides," as it is called, is the simplest and most elementary of all solids which have plane or flat faces or sides.

These are only the beginnings of the relations that may be traced out of the very simple matter of the cone and its sections, with reference to form merely; and the data, or things necessary for the finding out of the whole, are nothing but a piece of paper cut in the shape of a sector of a circle, and joined at the two straight edges so as to form a cone; for all the rest is a matter of relations.

And even the real conical form composed of paper or of any other matter is not necessary; for it is also a matter of relations, and all that can be affirmed of it, its sections, and their results, would be the same, although no cone, and no matter of which a cone could be made, had ever existed. It is the same with all the purely mathematical truths; they do not in any way depend on the properties or even the existence of matter; and they are not immediate objects of any of the senses, neither do they gratify any of our animal or mixed desires. They are mental throughout; and to be arrived at only by trains of thought, which can be equally well carried on by the blind or the deaf as by those who see and hear in the most perfect manner. It is chiefly for this reason that we have chosen them as an illustration of

the great advantage we derive from the capacity we have of proceeding mentally by means of relations, without any immediate reference to or dependence upon the senses or the external creation.

But those who do not of their own knowledge know the value of the practical applications of the mathematical sciences, must not hence conclude that those sciences are of less value to us in the arts and business of life than the other branches of our knowledge, for which we are in so far dependent upon the senses; for the very reverse is the case; and in so far as we are rational beings, elevated above the mindless animals, the less reference that there is to the senses of the body in any of our trains of inquiry, we can not only pursue them the more readily and the more successfully, but, strange as it may seem to those who have not experimental knowledge of the fact, the applications of these sciences which are in themselves purely mental are really of more value to us, in the business of life, in our operations upon material substances, than those in which we are obliged to have constant appeals to sensation.

To mention a few in illustration of what we are considering:—without the elements of the cone, that is, the triangle and the circle, our knowledge and our working would be reduced to a very miserable amount. The relations of these two figures to each other, too, are such that the one of them cannot be usefully known and applied without a knowledge of the other.

The triangle is the instrument by means of which we measure all surfaces, and all lines expressing distances, except very short ones. Without it, we should not be able to tell how many rods of ground are in a field, or how far one point or place is from another, unless in the few and

trifling cases in which we can apply a rule or measuring line all the way, and be sure that the successive applications of that are all made in the same straight line. But by the help of the triangle and its relations to the circle, we are enabled to guide a ship over all the seas on the surface of the globe, and visit in the course of the voyage every port at which we have a mind to touch. Not only this, but by the very same means we can tell the distance and the magnitude of every body that appears in the heavens, or else determine that its distance from us is so great that it is beyond all measurement and all conception,—that it is so remote from the earth that two hundred millions of miles is not equal to a fraction of the distance which we can express in terms of the whole.

Then as to the circle: all our carriages, machines, and almost every implement we use in those arts which have so vastly multiplied our accommodations and comforts, involve the principle of circular motion, and very generally circular parts of some kind or other. From the wheelbarrow to the printing machine, which are pretty near the limits both ways, all are dependent on the circle; and if that and the triangle, in themselves and their relations to each other, were taken from us, we should be reduced to very nearly the lowest state of helplessness in which savage men are to be found. So much for the simple elements of the cone.

Then, the other three species of sections which we obtain upon cutting the curve surface of a cone by planes — the ellipse, the parabola, and the hyperbola,—have some very striking relations to the more stupendous parts of the system of nature. The earth and all the other bodies which compose the solar system, perform their revolutions in ellipses. If the motion were in a circle there would be no

stability in it, and the slightest disturbance would throw the whole into confusion; but the motion in an ellipse contains in itself the means by which any disturbance is soon got the better of, and the body returns to its regular course. We may imagine cases, however, in which some of the more flimsy and unsubstantial bodies, such as the comets, might have their elliptic path changed to the parabolic, the hyperbolic, the triangular, or even the straight line, for shifting the plane of the section of the cone may do any or all of these; and were such an occurrence to take place, the body would be projected out of the system. On the other hand, the elliptic section might be brought to the vertex of the cone, and then the orbit would become a point, the motion in revolution would be at an end, and the revolving body would proceed directly toward the central one, about which it had previously revolved. It is not meant to be alleged that any one of these changes is at all likely to happen; but still, they are within the limits of possibility; and they show the connexion which the conic sections have upon the most sublime portion of the material universe which comes, or can in any way come, within the scope of our knowledge; and also how, by means of changes into each other of which the conic sections—and no curves but they—are susceptible, a body may be sent from system to system throughout the whole extent of the universe.

There are also various cases in nature, in which we meet with the parabola. Among the most familiar of these are the path formed by water issuing from a lateral orifice in a cask or other vessel, or falling over a rock or other elevation in a cascade, and by any body near the ground when projected in a horizontal or oblique direction.

These are varieties of the very same species of combina-

tion, and as such they are dependent on the action of causes which are in principle the same. The water, and the projectile, whatever it may be — a stone thrown by the hand, an arrow shot from a bow, a ball discharged from a gun, or any thing else which is obliquely sent into the air, is impelled by what is called an "initial" force — a force the whole of which is exerted at the moment of starting, and there is no future accession made to it. The weight of the water, or other substance or body, is a constant force, always acting in the direction towards the centre of the earth, and, in the same portion of matter, always with the same intensity when that portion is at the same distance from the earth's centre. The mean distance from the surface of the earth to the centre is about four thousand miles; and any difference in the height of falling water, or of any body the projection of which we can observe, is so trifling in comparison with this that for ordinary purposes we may disregard it, and suppose that weight, or gravitation, acts equally on the falling water or the projectile all the time that it is in the air. The initial force with which the water shoots from the orifice or over the rock, or that with which the projectile is at first thrown, is at the outset more powerful than the force of gravitation, otherwise, the gravitation would be instantly obeyed, and the fall would be perpendicular. But as this initial force is finite, it weakens, and although the force of gravitation does not actually become stronger, it becomes so relatively, and first becomes equal to the projectile force, and then gains upon it, till, if there were space enough, the fall would at last be very nearly in a straight line. This is the principle of the parabola; but the resistance of the air prevents it from being exactly the case in practice, although it is very nearly so.

There are also some very remarkable natural instances

of the occurrence of the hyperbola, and some of our artificial imitations of them are very beautiful. If we could see, as a detached object of the senses, a column of the common atmospheric air resting upon any given portion of the earth's surface as a base, and expanding as it was raised above this base, according to the laws of atmospheric pressure, so that it should be self-sustained and have the same quantity of matter in it at all elevations, this column of air would give us a very perfect hyperbola in its outline, on which side soever that outline were seen — for it would be the same on whatever side we view it in profile. It would be the same with the vapour of water, with smoke, or with any thing else that ascends in the atmosphere, if we could see it, and if there were no winds or lateral current of the atmosphere to disturb the form which it would, of itself, naturally assume. Of these natural examples of the hyperbola, there are, however, none which we can see in their full perfection, so as to be sensible of the beautiful stability of their appearance, although we can, from the principle, perfectly understand what their form must be, and what it would appear to the eye if we could actually see it. The column of smoke is the nearest approximation that we have, and that is imperfect, as the visible part of the smoke consists of particles which, evaporating as they ascend, do not assume the true hyperbolic form.

But there are some artificial imitations of this hyperbolic column which no one that has any taste can look upon without the greatest admiration and delight. These are to be seen in the old Gothic buildings, and in them only; and whether the architects who planned these were or were not aware of the effect which they were to produce, we have no means of ascertaining. These curves, which are so peculiarly pleasing to the eye, by their giving such an

air of stability and self-support, are to be met with chiefly in Gothic arches, and in those pillars supporting the arched roofs of Gothic churches, chapels, and halls, which melt into the mass of the ceiling, one cannot very well tell how; and which, while they have the appearance of bearing themselves up, seem to perform the same office for the whole of the ceiling into which they melt, without any one being very well able to say why they should do this so much more than is done by portions of circles, ellipses, or any curves save hyperbolas. The stability, in these cases, is as real as it is apparent; for, with all their airy lightness, those structures are more durable than those which, with other forms, have a much greater mass of materials.

The whole of our knowledge of these matters, and of thousands of others that could be mentioned, is mental—the result of a train of reasonings, proceeding entirely upon relations, which have the most simple data for their beginnings; and we have no reason to doubt that the mind could arrive at them with very little knowledge of the external world, perhaps with none. They do not immediately tend to the gratification of any of our animal wants or desires; and they are thus among the strongest proofs that we can have of the existence of mind, as distinct from and superior to matter.

It is for this reason, chiefly, that we have chosen them in preference to the poetical and other impassioned subjects, in which frequent appeals are made to the senses, that are usually resorted to in illustrations of the power and working of mind. We by no means wish to undervalue those impassioned matters which, so to speak, take the whole man, mind and body, along with them, and captivate the senses at the same time that they give scope to the intellect. But, if the expression may be allowed, the

most sublime poetry — the loftiest trains of thought, along with which objects of the senses are mingled, and appeals made to the animal part of our nature, are really of a lower order, and have less of the demonstration of immortality in them, than those purely mental abstractions from which, until we come to the practical applications of them, the external creation is excluded, and all the sensations and emotions of the body, as arising from or directed to the external world, are still. If we deprive the poet of his appeals to the objects of sense, and take from him his imagery, we destroy the charm of his most fascinating creations,— we "take away his gods, and what has he left?" The didactic poem is nothing without its pictures and its episodes, all of which are appeals to the senses; and, if you stripped him to the nakedness of his philosophy — leaving the errors and absurdities of that philosophy wholly out of the question — Lucretius, the master, and the matchless master, of didactic poetry, would not be readable.

But the mathematician stands in need of no such aids; for, on the contrary, he cannot use a single ornament of language, or appeal to the bodily sensations and feelings in one way or another, without breaking the chain of his reasoning and completely destroying its effect. In a word, though the subjects are very different, yet the mode of our mental states is very nearly the same when we pursue trains of investigation in pure geometry, as when we attempt the most lofty subjects which the mind can reach — creation, the mind in its separate state, eternity, immensity —the Almighty. Nor is it less delightful that, in these our mathematical, or purely mental abstractions, we should actually be learning more of the world of sensation — acquiring more dominion over it, than when that world is the express subject of our study, and all our study, and all our

senses are at work upon it. Such, however, is the fact; for, by the mere exercise of the senses, let it have been as keen and as diligent as ever it could possibly be, we should never have been able to measure the heavens or weigh the earth—make ourselves spectators and students of the whole frame of nature when we are locally confined to a minute spot upon one of the humblest of those masses of which the mighty system is composed.

Having thus thrown a hasty and imperfect glance upon one of the very many subjects in the knowledge of which we proceed by means of relations alone, without much aid from the senses or external means of observation—a subject of the knowledge of which we cannot find the slightest trace in any creature but man, — we may now proceed to notice the more simple phenomena of this higher exercise of the mind, — this which is our especial and our noblest endowment; and in doing this we shall follow the division which has been made of suggestions of relations, into Relations which are co-existent, and Relations which are successive, or follow each other in the order of time.

SECTION XIV.

CO-EXISTENT RELATIONS.

THE distinction of our suggestions of relations, as consisting of the two orders of co-existent and successional, must be regarded as virtual, not absolute; for we can scarcely name or even have a conception of any train of thought into which both of them do not enter, and enter in so close combination with each other, that in the analysis of the particular train of thought we are unable to separate them. In the use of the term co-existent, as applied to the states of the mind, we must also be understood as speaking of what is virtual only, not what is real. There cannot be two co-existent thoughts, perceptions, or feelings, let them be as transitory in their nature as they may. The mind is one, and therefore it can be in one state only at a time — for the moment, however short that moment may be. But the transitions of the mind from thought to thought, and from one part of any complex subject of thought to any others, are so rapid that we can take no note of them; and it is only to meet such cases that we use the word co-existent as distinct from the word successional or successive. The real states of the mind follow each other in "rank entire"—only one at a time, in the one case as much as in the other. The only difference is in our feeling of them, with reference to their subjects. If the subject in the complex parts which occupy our thoughts has no allusion to difference of time,

or to any train of succession, we speak of these as co-existent; and when we can refer to an order of time as being felt or understood, we use the term "successional."

To take a very simple instance:—"A tall man dressed in black, mounted on a very handsome white horse," is generalised by us into one single compound perception, though it consists of at least eight enumerated particulars. But of those particulars, though each of them must address itself to the senses and also to the mind separately in order to be felt, it is not easy to say which comes first in the order of succession; and, therefore, we describe them as being co-existent.

The immediate compound perception and the one which results from a suggestion of relation have this difference, that the parts of the perceived compound must be both present in space and in time, and the relation between them is inferred from the same sensal examination of both. But in relative suggestion this is not necessary, and it is independent of time and space in the suggestion of relations, which is its chief advantage, and which enables us to turn all knowledge to advantage, at what time and in what place soever the subjects of that knowledge may have existed; for, in forming our judgments of how we should act, we have not unfrequently occasion to take our example and guide from the conduct of those who lived many years before we were born.

When thoughts return to the mind in suggestion, we have far more power over them than we have over the objects of the senses; and hence, for one useful relation that has been immediately discovered by the senses, there are countless numbers that have been discovered by the process of thinking, that is, by comparing the ideas of subjects as they arise to the mind in suggestion; and there

are many books of which a single chapter could not have been composed in a life-time, if the authors had required to take the senses along with them at every step of their proceeding. Indeed, language would have been useless if it had carried us no farther than the senses; for these, so far as they go, are perfectly competent to the performance of their functions without its aid. There are no doubt certain sounds which are expressive of various passions, just as there are attitudes of the body and dispositions of the muscles of the face, and the animals have such as well as human beings: but these are not language; and though there may be mental emotions connected with them, they are not expressive of thought. The language of the passions is never very coherent; and the words which are uttered by persons under the strong influence of the animal passions, whether of more turbulent or more tender character, are downright raving, and have no philosophical claim to be called language in the mental or useful sense of the term. All violent bursts of passion are really temporary fits of madness; and this not only in the case of the more revolting passions, but in those which, under due regulation, are productive of the happiest results. The love-letters even of the most sensible persons in other matters always appear ridiculous to third parties; and there is nothing which a man in his calmer moments finds greater difficulty in doing than in concocting a love-letter that shall pass for genuine. He may deal as largely as he may in flames and darts, and all the other exotic *materiel;* but there is a thought and purpose in his composition which are easily distinguished from the unreflecting passion of a genuine lover.

Thus, the use of rational language, while it is the principal means of mental cultivation, is in itself a very strong

proof of the existence of mind as quite distinct from the body and its passions. But we shall have to consider this more at length afterwards; and so we shall only further remark now, that though the language of the passions forms a larger portion of the whole speech, both of nations and of individuals, in proportion as they are more rude or sensual, yet there is scarcely any tribe of men among whom no glimmering of thought can be traced.

But to return to the more immediate consideration of the suggestion of co-existent relations. Brown subdivides them into five genera, or sections; and although some of these are so general as to be not a little vague, they are perhaps as good an epitome as can be obtained upon a subject including every variety of thought, real or imaginary.

The first section consists of relations of *Position*, or situation. These are in themselves very simple, and can scarcely be said to embody any thing which is either in itself knowledge, or even the means of acquiring knowledge; but they are foundations upon which knowledge can be built; and, like the foundations of cities, they are true and constant, so that we are at all times certain to find what is built upon them.

A geographical map is an appropriate illustration of this. There is no objection to it on account of its being a material contrivance; for every thing and conception which is material must have position,—even a geometrical point, which has no existence but as a mental conception, is best defined by saying that "it has *position* but not magnitude;" for this is true of every geometrical point, and of nothing else. The old definition—"a point is that which has no parts," is wholly negative, and, therefore, it is no definition at all. That it "is not a sheep" is no definition of any animal—of an eagle for instance. It is also meta-

physical, and may be applied in the most absurd manner, and yet according to the genuine principles of logic. Thus, "A point is that which has no parts;" but, the human mind, and the Deity, have no parts; therefore, "the human mind and the Deity are points," is a good syllogism. But seriously, it would be false in philosophy and profane in religion, and even as an illustration it is absurd.

But the positive part of the definition,—the fact of having position,—confines it to matter, and this renders it not only intelligible, but the foundation of all our reasonings in the science of magnitude, which is the most exact and perhaps the most practically valuable of all the physical sciences. Every material existence, be it what it may, must have some position, and the boundaries of it, whether it be in itself large or small, and indeed the whole substance of it, may be referred to points. In the geometrical sense, the smallest atom of matter that we can imagine to exist, is points all round and points every where throughout,— these points meaning nothing more than the fact of position; and without a point to start from we can measure no extension of line, surface, or solid, whether great or small.

0 in arithmetic stands in the same relation to quantities expressed by number, as a point does to lines, surfaces, and solids in geometry; and the definition of 0 is, "that which has name but not number or value," which is an accurate definition, as it has no application but to 0.

As the relation of position is one which can belong to substantive existences only, the mental feeling of it, whether consequent immediately upon sensation, as it is when I see the point of the pen at the place where I intend to write a word, or as returning to the mind anew in the process of suggestion, is perhaps more nearly allied to sensation—that is, less removed from it, than any of our other

feelings of relation; and hence it is not only highly useful to us in aiding the suggestion of all matters that can have position, but we very frequently have recourse to it in matters in which position has no concern. Thus, nobody who has thought correctly on the subject would assign a definite position in space to the Deity or to the human mind. From all that we know or can know concerning the mind, it is present whenever the subject of its thought is present, whether that is past, immediate, or future, and whether real or imaginary; but it is present only at the position of one thought, that is, only one thought is present to it at the same instant, and the extent of the range is limited by that of the knowledge which has been acquired. The Deity, in possessing all knowledge from eternity, is present in all space and throughout all duration in every instant of time, or rather without reference to them at all. But this is a subject upon which we can have no direct knowledge.

But notwithstanding this, a locality has been assigned in all the mythologies, both for the disembodied shades of men in their separate states, and for the gods themselves; and there are many professors of the Christian religion who are not void of knowledge, and yet who would look with horror on the boldness of the heretic who should deny the *local* existence of heaven and hell as regions in the existence of material nature. Their unfounded belief is nothing but the old notion of the heathen mythologists, a little altered in the nomenclature; and yet they cling to it with more pertinacity then if it were not only not an absurdity, but a clearly established philosophic truth,—so prone is the mind to assign position to the subjects of all its thoughts, whether they in their own natures can have position or not.

It is this disposition which mankind have to assign positions, which has caused the birth-place of Homer, and that of other real or reputed authors of works which have made powerful impressions upon the minds of men in rude ages, so much matter of dispute and uncertainty, and also which has rendered it so very difficult to find the true localities of places which have left no memorial except on the record of history.

The fact that Sir William Jones, when at Harrow school, converted the fields there into a map of Greece, and a small brook into what the poet terms "the boundless and many-thundering" Hellespont, is strong evidence of this propensity; and, half a century ago, when the Bible was the sole companion of the "herd-boys" of Scotland upon the wastes for the live-long summer's day, there was, probably, not a lowland moor upon which the whole history of the Old Testament was not mapped down. I myself, in very early life, have approached with reverential feelings two or three stunted alders, never doubting that they were the veritable "willows" upon which the captive Israelites "hung their harps" *super flumina Babylonis*.

So prone are we, indeed, to take advantage of this relation of position or locality, that in every thing that interests us deeply, and of the nature of the real locality of which we are ignorant, a locality actually forces itself upon our thoughts, not only without wish, but whether we will or no. Robinson Crusoe's island, as described by Defoe, is certainly not like Juan Fernandez; and we doubt if any two children have the same notion of it.

It is this which makes the geographical map so very valuable as what is usually termed an "artificial memory," not only of the mere geography, but of every thing that

can be learned of the country which the map represents. It is true that the map of itself suggests nothing but positions; but if we acquire other knowledge along with the map, the map will be the means of suggesting that knowledge, even though it has no representation delineated there.

Such is the power of the relation of mere locality or position, in making one of the allocated subjects suggest the others, even though the relation should have no existence but in our own mind. The sight of a place, in the history of which, or of any thing, event, or circumstance connected with it, we have been deeply interested, not only brings all that interested us speedily to mind, but also all our other trains of thought connected with the time, the place, and the manner in which the original impression was made upon us. When, for instance, one crosses the moor near Forres, which is pointed out as the spot at which Macbeth and Banquo saw the witches, according to Shakspeare, one also sees the witches, and the caldron, and Macbeth, and Shakspeare, and all Shakspeare's characters, if one has been deeply affected by the reading or the acting of his plays. We overlook altogether the fact that the place which usually excites those emotions is on the wrong side of Forres, on the Inverness side; and as Macbeth came from Fife, he and Banquo must have come to Forres before they came to the "heath;" and thus Banquo's "How far is't called to Forres?" would have been an unnecessary and ridiculous question. But still, we not only get over this topographical blunder, but over the conviction of our reason, that the whole scene is a creation of the poet, or of some old story-teller from whom he derived the skeleton of the tragedy.

Many instances could be given of this power of position

or locality, as a means of relative suggestion; but as some must occur to every reader who is at all capable of reflecting on the subject, we shall proceed to the other subdivisions; and as the one which Dr. Brown takes next in order is a very important one, both in itself and on account of the mistakes into which philosophers have fallen concerning it, we shall make it the subject of a separate section.

SECTION XV.

SUGGESTIONS OF RESEMBLANCE OR DIFFERENCE.

SUCH is the title which Dr. Brown has given to the second subdivision of our suggestions of relations between subjects of thought, real or imagined, which, in consequence of the extreme rapidity with which the idea of the one succeeds that of the other in the mind, we regard as being co-existent; and those terms are perfectly correct, and both necessary to the proper understanding of this highly important section of our mental phenomena.

The relation of resemblance or difference is the result at which we arrive when we compare two thoughts—that is, two subjects of thought, directly with each other, and without any reference to a third subject as a standard of comparison. There are innumerable degrees, both of resemblance and of difference, among the subjects of our thoughts, whether these be the result of immediate sensation or the return of former ones in suggestion. Indeed, the process is so nearly the same in these two cases, that it is not necessary to make any distinction between them. As little is it necessary, in the meantime, to take any notice of the differences of degree; for these require the introduction of an element somewhat different from the mere consideration of two subjects in simple comparison; but still this simple comparison is the foundation of all

reasoning and all science; and therefore it is necessary that we should study it in its more general and simple form, and free from all the modifications which give diversity to the several cases of it. It involves the process of *Generalization*, and the use of *General Terms*, without which language would be of very little use to us as an instrument of knowledge, as it would extend no farther than the objects which had immediately affected our senses, in which case we could derive but little information from our contemporaries, and none from our ancestors; and the result of our mental labours would be lost to our successors.

When we see two visible objects, hear two sounds, smell two odours, or have any two affections of the same sense, be they what they may, the desire of comparing them is so immediately consequent upon the perception of the two that it appears actually to be part of the same mental state. There are some general differences in the desire which is thus consequent upon the perception of any two objects of the senses. We may desire to know in what they resemble each other, or in what they differ; and, if there is a difference of any kind, the knowledge of this difference is necessary before we can have a definite perception of that in which they agree.

Objects which affect different senses are not, logically speaking, fit subjects of comparison, though all the senses which have specific organs are so connected with each other (probably through the medium of that general sense to which no very definite name is given, though it has been called "muscular feeling," rather vaguely, inasmuch as there is no certain evidence that it is confined to the muscles), that affections which are pleasurable or painful to any one of them are more or less so to all the others. That which is pleasurable to any one of the senses pro-

duces a general pleasure over the whole body; and that which is harsh and grating to any one of them, sends a shudder of discomfort through the whole. Sights of horror and sounds of great harshness "make the flesh creep," as the expression is. They affect all the systems of the body, and through that reach the mind, so that when their objects are no longer present to the sense, they may again return to the mind in suggestion, and produce in the body, from the influence of the mind upon that, feelings very similar to those which were originally produced by their actual presence.

There is thus, in the body generally, independently of those organs of sense and sensations to which we give names, a certain faculty of generalization to which it is not easy to give a name. This, like all other matters of which the body has any feeling, must be communicated to the mind; there seems little doubt that it is the origin of that feeling of resemblance among the objects of the particular senses, upon which all the sciences, and even language itself as the general vehicle of knowledge between man and man, are founded.

The ideas of those feelings or resemblances no doubt return to the mind in suggestion, as well as all the other feelings of the external world, or of the affections of the body, of which we obtain our original information through the medium of the senses; and in these returns, the suggesting element may be either a present perception of the senses, or a mental state. But we can no more by any effort of the mind *create* a resemblance or a difference, or even a feeling of one, than we can create those objects of sense among which resemblances or differences subsist. It is true that, in many states of the mind, in which the emotions are strongly excited, we often discover likenesses

among things which in the sober judgment of reason have no resemblance. But these, though they may be highly pleasurable or deeply painful to us at the time, have no tendency to augment the sum of our useful knowledge. They are more related to the passions than to the understanding; and they are near akin to those personifications of inanimate beings which are most common in the earlier stages of mental developement.

In order, therefore, to have a clear understanding of our feeling of the relation of resemblance, and of that of its opposite difference, we must begin with the very simplest case, that of two objects of the senses which are presented at the same time,—say two objects of sight, such as two flowers or two birds. The flowers may be both roses, the one white and the other red; and the birds may be both crows, the one the hooded or Roystone crow, with the leaden grey mantle, and the other the carrion crow, with the mantle black. In the case of each of these pairs, every one must admit, that there are perceptions of resemblance which not only warrant our calling both members of the one pair flowers, and not flowers only, but flowers of the same genus—roses; and in the other which make us call both members of the pair not birds merely, but birds of the same genus—crows. In addition to this feeling of resemblance in each pair, which is an observed fact, and not in any way the result of a mere emotion on our part, there must be a cause, and this cause must affect the organ of sense previous to the mental part of the process.

The question is, what is this cause? and though it seems a very simple question, it has been more darkened by words, and these the words of the very ablest men that have spoken and written upon mind and its phenomena, than any other question that can be named. It is quite

clear that the two flowers or the two birds must be perceived by the sight the one after the other. How soon after, is no essential part of the question, but it must be after, and if a moment after, it is the same in principle as though it were a week. How rapidly soever the eye may, from the peculiarity of its muscular structure, glance from object to object, it cannot see two objects at the very same instant, whatever may be their size and position with regard to each other; and though the mere organ of the sense could do this, which it cannot, even though there are two eyes, the mind could not receive the two impressions of the sense at one and the same instant; for each of these is a state of the mind, and with whatever rapidity the mind may pass from one state to another, it is not capable of being in two states at the same instant.

But the relation of resemblance, which makes us call the one pair of objects flowers and the other birds, as well as the more close resemblance which makes us call the two flowers roses and the two birds crows, must be subsequent to the mental perception of them both; and this perception is itself, in each of them, subsequent to the impression made by the object upon the organ of sense. We need not say that the eye, or the other sentient part of the body, whatever it may be, general or local, can add nothing to the fact of organic affection, and this does not, in any one case, amount to the perception that there is a real object which affects it. Colour is all that the eye sees, and the shape and form of the coloured surface—as, whether it is round or square, and whether flat, concave, or convex, and even the fact of there being any coloured surface at all, are mental conclusions, arrived at by experience; only, after that experience has been considerable, the mental perception and belief in the existence of the object follow so

instantly upon the perception by the sense, that we are not conscious of the succession, but feel the presence of the object as though it were actually the organic succession, and not, as it is in truth, a mental process consequent upon that.

When we look at the two flowers or the two birds, the mere sensation of the one of them cannot be in any way affected by the sensation of the other; and the organic change of the eye produced by the sight of a red rose must be exactly the same in itself whether it is followed by the sight of a white rose or not. So also must the sight of the white rose be the same, whether it is or is not preceded by the sight of a red rose — we know it just as well when we see it among green leaves, as when pulled from its stem and not contrasted with any thing else that is vegetable. It is true that those colours which are the complements of each other in the formation of the beam of white light, as white with black, green with red, and yellow with blue, show better in contrast than any others; but this also is the result of a mental process—of that very feeling of relation, the origin of which we wish to ascertain, only it is one of the very many modifications of which this most important feeling consists.

The sensation, the mere affection of the bodily organ, is gone the very instant that the organ is withdrawn from the object by which it is affected; or if any effect remains upon it after this, it is the mere sensation of fatigue or exhaustion, which is common to all the active structures of the body when they are exerted beyond the proper degree. There is no memory in the eye of what it sees, or in the ear of what it hears; and though intense looking at a brilliant colour will produce a phantasmic affection of the eye, yet that is never of the same colour as the object by which the

eye was fatigued. If, for instance, we look at the setting sun for some time, until the eyes begin to be dazzled, the occurrence of which will depend on the physical state of the eyes,—if we do this and then suddenly turn to another part of the horizon, we shall see suns there ; but they will not be of the ruddy flame colour of the setting sun, but of the colour of its complement to the beam of white light, that is, of a purplish green colour. Sounds which have been listened to till the ear is fatigued, have upon it a drumming sort of noise ; but whether there be really affections of the organ or mental remembrances, it is not very easy to say ; and we have no understanding of complemental sounds in the case of the ear, as we have of complemental colours in that of the eye.

There are other affections, which feel as if they had their localities in various parts of the body, which remain after the objects supposed to produce them have been withdrawn from the organs of sense ; but it is doubtful if these are any more than floating memories of the previous sensation ; and, whatever may be their origin, they are of too indefinite a nature for being the bases of any comparison.

Upon every view that we can take of the matter, therefore, there is no provision to be found in the body and its organs, for any means or power of comparing even the most simple subjects ; and consequently none by which any relation, whether of resemblance or of difference, or of any thing else, can be arrived at ; for, if the body can take no part in the middle process—that of the comparison, much less can it take any part in the ultimate process—the discovery of the relation, to which the middle one leads, and which cannot of course be arrived at without it. Hence, we must regard comparison as wholly a mental

operation, and one which belongs to man alone of all the living creatures that people the earth.

The examples which we have given, of the roses and the crows, as immediate objects of sight, have been chosen in preference to any in which one or both of the immediate subjects of comparison are mental suggestions without the presence of any external object by which the senses can be affected; and we have endeavoured to show that, even in them, the part which the bodily sense performs is a very elementary or preliminary one, and can no more of itself bring about the result, than the mere opening of the door can bring into the house the person or thing which we desire.

The steps of the process may be recapitulated as follows: First, whether in the case of the two roses, or in that of the two crows, there is the organic change in the eye produced by the one and then by the other; and with this the bodily sensation ends. Secondly, there are the mental perceptions consequent upon these organic changes, and following in the same order of succession; and, however short the time may be, the first of these affections must have passed away as a mental state before the mind can be in the second, for the mind cannot be in two states at the same instant. Thirdly, there is the return of the first mental state— the return of the white rose immediately upon the mental perception of the red one, or of the hooded crow immediately upon the perception of the black one. It must not be supposed that the one of these perceptions, instantly as they follow each other, can remain in the mind to meet the other one, for that would be the mind in two states at once, which is impossible. Nor must it be supposed that, when two mental states arising from affections of the senses immediately follow each other, the

comparison of the two objects producing those affections can follow without any process of suggestion. Time is no element in those mental processes; for though a recent idea comes more readily to mind than a remote one, it does not come more quickly;—the idea of the creation of the world, such idea as we may have of it, comes as quickly to mind as the idea of the very last moment. Thus, in forming the comparison, the order of succession in the subjects compared is reversed, by the return of the former after and by means of the latter; and the feeling of resemblance or difference is, in such cases as those of which we are speaking, the real *act* of the mind which brings it back. If the evidence brought in the two sensations, and the preparation of the mind by former knowledge, be sufficient to produce a belief of the resemblance, or difference, as it may be, then the decision is instantly made; but, if the evidence is not complete, and no desire of the knowledge of the fact arises in the mind, no conclusion is arrived at, and the whole passes away without any addition to our knowledge. But if the desire or wish to know the fact of the resemblance or difference is sufficiently strong,—and the strength of it will depend very much on the habit of the mind—the trains of thought in which we have been engaged,—then we will return to the examination of the two objects, and scrutinize them, either till the conviction becomes perfect, or till we discover appearances in them to which no former idea will answer in suggestion; and the ungratified desire—the pain of the feeling of ignorance, will send us to our studies, and if strong enough, will not let us rest until we have either ascertained the fact, or find ourselves unable to do so, and abandon it in despair. These abandonments are very serious matters; for if they are often repeated they become habits of the mind, and we

pass through life, seeing many things, but understanding or desiring to understand none.

The simple fact of seeing two flowers and knowing that the one is a white rose and the other a red, or of seeing two birds and knowing that one is a hooded crow and the other a black crow, thus looks somewhat formidable in the analysis, though in practice, to one who has a knowledge of flowers or of birds, the time which it occupies is too short for being named or estimated by any instrument,—even our feeling or consciousness of it is perfectly momentary; and yet it must consist of all the parts which have been enumerated.

Nay, what has been enumerated is only a very small portion of the whole process; for if there were no formerly-acquired knowledge to come to our aid in suggestion, the mere affection of the eye, which is really all that we get in the particular case, would tell us little. We have, for the sake of simplifying the instance as much as possible, taken it as of a person whose mind is prepared to come at once to the decision,—of one who knows flowers and birds, and is capable of discriminating the varieties to which we have alluded. If we had taken either of these as a first instance of sensation, and first act of the mind consequent upon it, we should have come to a very different conclusion, or rather to no conclusion at all. In that case, nothing could have been communicated to the mind but a simple feeling, which, instead of giving an idea of any external object, flowers, birds, or any thing else, would not, and could not, have given the slightest information even of its own locality. The extreme vagueness of those early feelings has been noticed in a former section, and their beginning traced to the verge of absolute ignorance; and there is a laborious experience both of sensation and of mental action be-

tween that and the discriminating of two flowers or two birds.

First, we have to acquire a knowledge of our own bodies and their organs as materially existent. Secondly, we have to acquire a knowledge of the external world, as distinct from our bodies. Thirdly, we have to learn how to discriminate a very great number of the subjects of which that external world is composed. We must distinguish matter as substantive, from the properties of matter as expressive of the different portions of it in their co-existence, and both of these from the phenomena of matter, as expressive of its successive states. We must distinguish vegetables from animals, and both of these from inorganic matter; and, when we have made all these distinctions, we are only at the mere threshold of the matter,—short of the point at which a child arrives before we think of beginning its formal education. After this we have to pass through a long muster of classes, orders, and genera, in plants and animals, before we can arrive at the means of discriminating the roses or the crows; and when we say of two objects of sight, "That is a white rose and this is a red," the result of the whole of this preparatory knowledge is required—must be used, and so must be possessed, whether we know how we came by the possession of it or not.

In the example which we have cited, there are many relations immediately and indispensably concerned; and though, from the rapidity with which these come and go in suggestion, we are not conscious of them, they must all arise before we can come to a judgment. There is a relation of resemblance among all the four subjects—they are all substantive existences. Then there is a relation of difference between the one pair and the other—the one

pair are flowers, the other pair birds; there is a relation of resemblance between the members of each pair,—general, as they are flowers in the one and birds in the other, and particular, that the flowers are both roses, and the birds both crows; and there is a relation of difference in each pair—the one rose is white and the other red, the one crow hooded and the other black. In all these relations,—and most if not all of them are complex, and might admit of farther analysis,—there is a necessary allusion to a former standard,—to the idea of that which is declared of each as a former portion of knowledge or state of the mind; and from the very nature of mind, all of those ideas must return in suggestion before we come to a conclusion, that we see two roses and two crows of different species or varieties.

All these suggestions must arise before the conclusion can be arrived at, and yet, to one who knows the flowers and the birds, the process is instantaneous—we cannot take the least note of its length. The knowledge — the mental standards of comparison — cannot, however, be obtained without much experience; so that years of study are required to prepare us for the decision of a single instant. The celerity with which the mind acts in these cases, in every case in which it is "ready for action," is truly wonderful, and sets at nought all that we can witness or judge of in the case of matter, or material action. We speak in terms of exultation of our swift conveyances—of our improved carriages, and our engine trains,—we can but faintly understand the career of a planet in its orbit, and barely name the motion of the light of the sun, which is nearly at the rate of two hundred thousand miles in a second of time. But the clog of matter is upon each and all of these, and the very swiftest of them is really nothing

in celerity as compared with the action of mind. It is truly inexpressible—above all estimation in value; and we cannot be too grateful for possessing it, or too assiduous in its improvement.

Those former states of the mind which return in suggestion, and enable us to decide that there is an object of sense, that this object is a vegetable or an animal, or any one species of either — or in short, that it belongs to any one class or kind of subjects of knowledge rather than to another, are what are called *general ideas*, and the words by which we express them, such as substance, being, plant, animal, rose, and crow, are called *general terms;* and how we come by the knowledge of these, is a subject upon which there has been much and sometimes very unseemly disputation.

One of the reasons of this may probably be found in the fact, that the order in which this subject presents itself to us when we wish to examine it is the very reverse of that in which it is formed. It has been mentioned that, in relative suggestion, the order of the thoughts, ideas, or mental states, from the comparison of which the relation, whatever it may be, is deduced, is reversed,— that is, the former member of the comparison is suggested by the latter, and, therefore, is subsequent to it in the order of consideration when the comparison is made. The sight of the picture or other representation brings back the memory of the former person or scene; but the knowledge of the person or scene is not necessarily followed by any picture or other representation.

In like manner we learn the process of generalization, and acquire general ideas and the use of general terms by syntheses, that is, by building up or collecting together those particular subjects, which agree with each other in

so many particulars as that any one of them suggests others; and when a new subject of perception suggests any of those classes which we have formed, we add it to that class. The general idea of a man is really the embodyment by the mind, so to speak, of all the particular men that we have known, or heard, or read of, leaving out those relations of difference by which we are enabled, when so inclined, to specify any particular man. The general idea of a triangle is that of a straight-lined figure with three corners, without any reference to the lengths of the side or the relative sharpness or bluntness of the corners.

It so happens that this is a very perfect and definite idea; for the sum of the three angles is always the same angular measure, however the sides and the particular angles may vary; and the same may be said of all straight-lined figures that are named from the number of their angles only.

Some idea of the mass of error and absurdity which had been previously accumulated upon this subject of general ideas, may be formed from the fact that the following singular passage respecting the "general idea of a triangle" was gravely written by Locke:—"Does it not," says he, "require some pains and skill to form the general idea of a triangle, (which is yet none of the most abstract, comprehensive, and difficult;) for it must be neither oblique, nor rectangle, neither equilateral, equicrural, nor scalenan; but all and none of them at once. In effect, it is something imperfect, that cannot exist; an idea, wherein some parts of several different and inconsistent ideas are put together."

There cannot be a more erroneous notion of the process of generalization than that which is embodied in this often-quoted passage. In the sense in which the word is used here, no man can "form" any idea, whether general or

particular. No man can *form* an idea, any more than he can *create* the subject of which it is the idea. Man may know, but he cannot make the subjects of his knowledge. He cannot invent even a single relation between one subject and another; all that he can do is to find out relations which exist; and even those cases which we call inventions, whether they relate to mechanics or chemistry, or to matters of a more poetical character, are merely discoveries that relations exist and applications may be made which were not previously known. It has already been mentioned, that "to invent" means nothing more than to find out; and that which we find must of course exist before we can possibly find it. An idea, whether general or particular, when it returns to the mind in suggestion — and the suggestion of it requires a cause as well as the original impression of it on the mind—may be a means of new knowledge; but it is originally and in itself an effect, not a cause,—the consequent of its subject and not the antecedent. Therefore, a general idea, instead of being a state of mind that any human being can by possibility form, is an ultimate result of thought, and can be arrived at only by an induction of the particulars. The notion which Locke, and indeed all the philosophers which have treated of mind, with the single exception of Dr. Brown (at least of those whose writings we have consulted), and he hesitates, have of the process of generalization, begins where nature ends—takes the ultimate conclusion as if it were the premises—and thus the whole of them are in error.

In the real process of generalization, we do certainly proceed from the particulars to the general conclusion; but that conclusion does not contain an embodyment of the particulars, as all the ingredients are contained in a chemical compound, all the parts in a mechanical engine, or all

the items of an account in the sum. The generalization consists in throwing out of each particular case all those circumstances which make it particular, and retaining only those which are common to the whole. In the case of the plane triangle alluded to by Locke, the general idea must certainly not be that of an oblique, a right-angled, an equilateral, an isosceles, or a scalene triangle, neither must it be a triangle that has the sides of any named lengths, or the angles bearing any named ratio to each other. Any one of these would destroy its general property and reduce it to a particular triangle. But it has a property which is common to all the possible varieties; it must have three angles, and the sides, the meeting of which forms these angles, must be straight lines. Leave out the condition of the three angles, or introduce a curve as one of the sides, and there is an end of the general idea of a rectilineal triangle — that which constitutes the essence of it is taken away, and there is a condition introduced which cannot belong to such a triangle in any possible variety.

In every case of generalization, the principle is the same as in this very simple one of the triangle, only there are comparatively few in which the particulars are so few, so well known, and so completely in our power. Hence, in all the mixed sciences, in which the properties and phenomena of the productions of nature have to be considered, in the science of mind, and especially in the sciences of human conduct and government, we cannot go at once and clearly to the ultimate generalizations, as we can do in the case of geometrical figures. In them we must have recourse to various states of generalization, which will lead us from the single individual that we observe at a time, to the most comprehensive range which our generalization can include.

Thus, for instance, in the animal and the vegetable

kingdoms — the departments of external nature in which the majority of us probably take the greatest interest, we have individuals, varieties, species, genera, families, orders, and classes — with numerous sections and subdivisions of each, according to the knowledge and fancy of those by whom the systems of progressive generalization are made, until we come to the most general idea that we can have of an animal or a vegetable, and from that we proceed to the still more general idea of the material creation.

The various parts, or steps of generalization in these systems, as they are called, depend on the knowledge of the parties by whom they are contrived; and as none of them has hitherto been such that it could be regarded as perfect, they have been very frequently changed — sometimes for the better and sometimes for the worse. In ages of comparative ignorance they are chiefly founded upon external characters, which are apparent to the senses. Thus, in the common speech of most nations, the whale is accounted a fish, the spider and the lobster are insects, and the snail and slug are worms. But as men get a little better informed, they begin to found the steps of their generalizations upon more accurate views; and though none of these are perfect, some are far better and more valuable than others. The systematic arrangement of the *Vertebrata*, or animals having backbones with a cranial cavity for the brain attached to the anterior extremity, and also of some of the invertebrated animals, by the late Baron Cuvier, are probably among the happiest efforts which have been made in this way; and it is probable that some of the more minute divisions or steps in generalization, which have been made, or are making, by later and less able naturalists, are, in reality, retrogressive movements back to confusion and ignorance, by means of which the parties in

truth embarrass that science which they are willing to promote, and have the vanity to fancy that the execution of their will shall be a benefit, while it has the very opposite effect.

In the generalization of the science of plants, there are some difficulties which do not occur in that of animals. The various subjects have not so many or so expressive ways of telling their own story; they are more susceptible of alteration in those experiments which are made upon them with a view of arriving at the truth; and it may be possible that they have attracted men of inferior acquirements — men who, perchance, have been, and are, more zealous for their own fancies than for the truth, or the facility with which the truth may be arrived at by means of their systems. The modern doctrine of types, as representing certain groups or families, animal or vegetable, may not be allied to those errors upon the subject of general ideas and general terms which so long and so much retarded the progress of true knowledge; but certainly they have not a little of the same sound to the ears of the uninitiated. What would a geometer think if you were to talk to him of a typical triangle, a chemist of a typical gas, or a moralist of a typical virtue or vice? Assuredly the one and the other would feel as if "chaos were come again," and the mathematician would be "frightened from his propriety" by the spectre of Locke's mysterious and impossible triangle.

In the rearing of the fabric of knowledge, upon every subject that has assumed the character of a science, the process of generalization proceeds in the way that we have endeavoured to explain. The progress is from particulars to generals, by more or fewer steps according to the nature of the subject; and the suggestions of the resemblance are the means by which we generalize, while those of difference

are the correctives which keep our generalizations within the proper limits. It is the province of the great masters only—of those who have by the most careful investigation made themselves thoroughly acquainted with all the parts, to rear the fabric of any one science, or to tamper with it after it is reared; and before any one presumes to do this, he is bound to show in the clearest manner that he possesses more knowledge than was possessed by him whose fabric he presumes to alter. The province of "the common file" of labourers in the field of science is more humble, though, taking them in the aggregate, perhaps not less valuable. They have to find out the place in the system to which their discoveries belong, and thus merely augment a little that fabric which it would be unwise in them to attempt to alter. There are, however, some of those parties, and they generally among the least experienced and fit for the task, who take to the trade of system-making, and waste in vain attempts at what they cannot accomplish, that time and labour which they might devote to less pretending but far more useful purposes.

Such is the general order of proceeding with those who derive knowledge from its original sources, and arrange and store it up for the general benefit of mankind. But when we go to school, and wish to profit by the information which has thus been provided for us by the teachers of all ages, the order of proceeding is completely reversed. In this, which may be termed the scholastic mode of procedure in opposition to the original one, we begin with the generals, and gradually descend to the particulars; and this order is the judicious one; for the more general the truth is the fewer are the details, and the more easily it is comprehended as a lesson. Thus, the general idea of a triangle, or figure of which the only definition is that it has three

angles and is bounded by the same number of straight lines, is far more simple and easy to be understood than that of any particular species of triangle, in which we are encumbered by the length of the sides and the relations of the angles opposite to those sides, the sides being in proportion, not to the measures of the angles, in terms of the axes of a circle, which are the original measures of the relations of angles to each other, but in proportion to "the sines" of the angles, which introduces another and a much more complicated relation.

It is much the same in every other case,—the farther that we descend from the general idea to the particulars, the subject of our contemplation becomes the more intricate, and encumbered with peculiarities. The general idea of an animal is, for instance, much more simple and easily understood than that of a vertebrated or invertebrated animal, because it alludes to the kind of life merely, and not to any part of the organization. The idea of the vertebrated animals, taken generally—that of having animal life and a backbone, is more easily understood than that of any of the other classes — mammalia, birds, reptiles, and fishes, for the distinctions of which additional characters must be introduced. So also the idea of the class is more simple than that of the order. Thus, any member of the order *Ruminantia* involves the idea of chewing the cud in addition to those of animal life, having a backbone, and suckling the young. The genus is more complicated than the order, because the generic characters have to be included; and for a similar reason the species is more complicated than the genus, and the variety than the species.

It is the same with every department of science in which there is a system or classification; and the object of every such classification is to enable one man to obtain, in a

moderate length of time, a general idea of that knowledge, the original discovery of which has cost the labour of many men for many ages.

But we must not thence conclude that our knowledge is more accurate in proportion as more extended generalization renders the expression of it more simple. The reverse of this is the fact. Knowledge cannot be condensed, neither can it be abridged but by leaving out a portion. It is very true that the words in which we seek to convey information may often be most advantageously reduced; for there are very few compositions, either spoken or written, which do not contain many words which, instead of furnishing any knowledge, darken that which the others would convey; and also many that convey knowledge to one mind and not to another. There are imperfections of language, or rather inapplicabilities of the same language to minds of different degrees of information and different habits or trains of thought, which no man who addresses the public or any considerable number of them can avoid. The best precaution is, to speak or write upon no subject which is not thoroughly understood. It is true that a man who is in the habit of speaking or writing from original thought cannot treat any subject without having many new views of various parts of it. But this self-information, to be at all tolerable either to a hearer or a reader, must come in without any effort, as nothing can be more ludicrous, or destructive of the real information which may be in a speech or writing, than to see the author labouring with might and main to make himself understand what he is about, to behold him—

> "Explain a thing, till all men doubt it;
> And write about it, goddess, and about it."

We have already endeavoured to show that generaliza-

tion consists in the omission of the peculiarities of individuals, and retaining only those characters which belong in common to the class, or other collection to which we apply the general name; and thus, the higher that we carry this generalization, the farther we are removed from the actual sources of knowledge, or the means of verifying the knowledge that remains by the test of experience. Hence, in proportion as ideas are general, they are vague; and the general terms in which we express those ideas must follow the same law. If we think of a horse, a dog, or a sheep, the animal at once comes in suggestion,—in the likeness of that individual with which we have been best acquainted, no doubt, but still so well made out and true to his species that we cannot mistake him. But when the general term "animal" is the suggesting word, if we attempt, by means of the emotion of desire and the attention which always follows that emotion when it is intense and prolonged,—if we attempt, in this way, to obtain for the idea a similitude which can be thrown upon the intellectual canvass, with scarcely less vividness than the mental feeling of an object present to the sense, we find that all which we can obtain is very like Crambo's "universal idea of a lord mayor,"—"without stature, colour, hands, head, feet, or any body." It is the same when we think upon the subject or meaning of any other word equally general,—we have a feeling that there is some shadowy meaning; but it is before us as "a spirit," and "we cannot discover the form thereof." If the term, and the generalization of which the term is the sign, be more general than what is expressed by the term "animal,"—that which is suggested to the mind when we hear the term pronounced, or see it written or printed, or when in a train of thought it is suggested, the idea which comes to us in suggestion is more

vague; and in proportion as the generalization is diminished, the idea suggested by the name approaches nearer and nearer to being definite; but if we wish to obtain it quite as definite as an object which we have actually examined by the senses, we must get rid of the whole of the generalization, and come to the individual.

As this is the first occasion upon which we have alluded to the "suggesting *word*," and the "*idea*" which that word suggests, whether we hear it spoken or see it expressed by the signs of language as addressed to the eye, it may be necessary to take some notice of the relation between the word and its subject, inasmuch as, though this is one of the most common and most valuable of all our suggesting relations, there is something peculiar in it. It is wholly a conventional relation—a relation which a nation or tribe of human beings agree to make use of as the means of communication with each other: and there is nothing in nature that in any way answers to it. Between a picture, and even a hieroglyphic, and its subject, there is a resemblance of external appearance, often a very rude one, we grant, but still a resemblance such as would enable us, in a very strained generalization, to include the picture or hieroglyphic and its subject in one common class. But in the case of a word and the subject of which that word certainly does suggest the idea, to all those who are familiar with the language and with that subject, there is no natural resemblance of one kind or another. The word MAN, for instance, whether seen in writing or heard in sound, has no resemblance to a human being; and so it might, with equal propriety, have been made the suggesting sign for a star or a stone. So also the word JOHN might have been the suggesting sign for a house or a haystack, for all mankind, for time, for space, or for any thing

capable of being expressed by means of a sign, if the framers of the language had agreed among themselves that such should be the use made of it.

In the case of the word and the subject of which mankind have agreed that that word shall be the sign, there can be no relation of resemblance, of difference, or of any thing else, as relations subsist and are discoverable between idea and idea, that is, between the subjects of which those ideas are the mental feelings, perceptions, suggestions, or whatever else we may call them. There is but one idea to the two, and that idea belongs wholly to the thing signified, and not in anywise to the sign. The word, of itself, could suggest nothing farther than that a certain noise was heard, or that certain forms were traced or stamped upon paper or some other substance. It is only in consequence of the application or meaning of the word being previously known, that it can become an instrument of suggestion. If we meet with a word for the very first time, pronounced alone in speech or seen alone in writing, we can attach no meaning; it is an idle sound or sight, which passes barren into oblivion, and never can be suggested but when it is repeated; and that is not a suggestion but a renewal.

When a word is perfectly simple and original, which means that the subject of which it is the sign has these qualities, it is always impossible to discover any meaning in it by any mental or other process which we can perform of ourselves, or in any other way than by being simply informed that such is the fact; and after we have been so informed, we can assign no reason why it should be the fact, in addition to the simple information that according to the usage of the language it is so. Very many of these original and simple words are monosyllables; and it is probable that they were so originally, though the parts

represented by the different syllables cannot now, in every case, be pointed out. In the English language there are still, however, many words of more than one syllable, and those belonging to all of the many other languages of which our present English language is compounded, in which each syllable can be distinctly traced to a meaning which it once had, or has still when it is used alone; and, wherever this is the case, the two syllables suggest a relation between the two subjects of which they are the signs; though this relation is not always a very definite one, inasmuch as both the component syllables and the compound word have come, in course of time, and from the varied characters of the minds of those persons by whom they have been used, to have different meanings, some of them original or literal, and others metaphorical. To give a very simple instance, the syllable "head" has three different meanings in the three compounds of two syllables each, "headache," "headsman," "headstrong." In the first of these it alludes simply to the head as part of the body; in the second it points out that the office of the man is to separate the head from the body; and in the third, it does not refer to the head at all, but merely expresses that the party to whom it is applied follows his own opinion and purposes in preference to all the advice that is given him, even though he should suffer by so doing.

As the mind of every man is known, and measured, and estimated, only by the nature and extent of the knowledge which it displays, and as no two men are, perhaps, alike in these respects, so it is probable that no two men use the same word exactly in the same sense. Hence, in the course of time, very many words come to have more meanings than one, even in the general use of them. Thus, the current speech of an ignorant and vulgar person, that is,

of one whose trains of thought have been low and limited—for there is no *original* difference in mind of which we can have any knowledge, and that is the same to us as if there were no difference in reality—the ordinary language of such a person, even when in the most tranquil or pleasurable mood, would indicate, if used by a person of knowledge and refinement, not only great depravity, but a state bordering upon madness—a state in which all the mental superiority usually displayed would seem—and for the time would be, subdued and sacrificed to the mere animal; that which is mere habit—the result of education and companionship in the one, would express degradation and depravity in the other; it would be misfortune in the one, in the other it would be crime.

All these, and many other illustrations which might be mentioned, prove that no word, however simple and definite may be the sense in which it is used, has, *in itself*, any power or means of suggesting an idea. The idea which it does suggest depends wholly upon the habit of the person using it; and the same idea may be and is suggested hundreds of times in thought, without the slightest allusion to any word whatsoever. The necessary conclusion from this is, that *no knowledge can* ORIGINATE *in words*, let them consist of whatever sounds or symbols, be used in whatever sense, and belong to whatever language, they may.

This is a simple conclusion, and, taking even a small portion of the evidence, it seems a very obvious one; but, as we shall see by and by, it is one of the utmost importance. Words are the instrument or contrivance by means of which we all obtain the greater portion of our knowledge; to these we are indebted for all that distinguishes the most enlightened and refined of nations and of indi-

viduals from the most abject and ignorant. They are not the builders of the fabric of improvement, for that is the province of men themselves; nor are they the materials of which that fabric is built, for these are the subjects of knowledge, and not the knowledge itself, far less the mere arbitrary means by which the knowledge of one individual or one age is communicated to other individuals and other ages. But they are the vehicles by which the materials are brought to the structure, and, in some respects, the tools which are used in the rearing of it. Still, they are of great and indispensable value; and, perhaps, there is not any single proof of this more striking than the fact, that the special Revelation by God to the human race, which is to them peculiarly and alone of all the creatures that tenant the earth, does not consist of any thing great in science or grand in art, but in the simple words of a book—the Book of the Revelation of the Living God, and of the way of life and salvation through Him.

But though language is thus highly important—more valuable than any or all other human contrivances taken together, yet we must not give to it a character to which it is not entitled, or ascribe to it powers or properties which, from its nature—the very circumstance which makes it so valuable, it cannot possess. Why is a steam-engine more valuable to us as a power in the performance of mechanical labour, than falling water or blowing wind? Evidently because we have more command of it, and can, to a very considerable extent, have it and use it where, when, and how we wish; and we can do this because it is more our own contrivance than the water or the wind, and the machine which either of them puts in motion, taken jointly.

Yet, in the case of the steam-engine, we are trammelled

in the mechanical part by the properties of the materials of which that part is made, and this without taking into consideration the water and the heat, from which we obtain the steam power. Language is far more completely in our power than the steam-engine is, because we are not trammelled by the properties of our materials. There are no substantive parts in a word,—no properties of matter to contend with in the contrivance of words; for though the organs of speech and the written characters vary in different nations and individuals, the words of all languages have the same kind of application to the meanings.

There are, no doubt, very considerable differences in the language, corresponding to the different degrees and kinds of mental cultivation. Where all the people are rude and ignorant, the general structure of the language is more impassioned and poetical than it is among nations which are of a more thinking character. The rude people are more influenced by the merely animal passions, and even their mental emotions are much sooner and more easily excited. With them, the speech and even the action follows very speedily the exciting cause, and they both say and do according to their momentary impulses. Persons of more knowledge, who are capable of taking longer and more general views, "think twice" before they speak, and thrice before they act. The language of the rude people, figurative as it is, contains comparatively few general terms: is much nearer to the individual names than that of those who are more profound; and for this reason it is more readily, more completely and generally understood. The language of cultivated nations, on the other hand, partakes much more of that vagueness which results from the copious admixture of general terms.

There is one thing worthy of remark in the language of

highly civilized or intellectual nations. Such nations consist of individuals and even classes of men of an almost endless variety of characters. Some are as rude and ignorant as the veriest savages, though these are restrained by laws and the influence of the more enlightened classes, to whom they are as a matter of course subservient, from openly conducting themselves like savages, how much soever they may resemble these in their thoughts and feelings; and there are between these and the very highest in intellectual culture and moral feeling, a countless number of shades. Each has a language appropriate to itself, and is in comparative ignorance of that of every other. London, for instance, is not more appropriately "Babel" in any sense than in the multiplicity and "confusion" of its "tongues." The "High Dutch" of the "exclusives" of the West, and the "Low Dutch" of the "excluded" of the East, are as different from each other as Chinese and Cherokee: and the *slang* which forms the appropriate speech of the Senate, the Bar, the Convocation, the Academy, and many other septs of persons that could be mentioned, though most appropriate among the initiated of each, is "Heathen Greek" to men of plain sense, who have no desire but to know matters in their real nature and usefulness, and call them by their proper names. The word "slang," though in common parlance a low word, is beautifully expressive in these cases. It is from the verb *slængan*, "to throw far"—to "draw the long-bow," as the phrase is; and it is used not to explain but to conceal the real purposes of the parties. The word "sling," which means the instrument by means of which any thing is "slung," or "slanged," always implies both a lengthening and a looseness; and we never apply it to any thing which is closely bound, so as to keep steadily in its place. "Slang"

words are words which are discharged from a "sling," that is, which are propelled by a greater lever power than that of their proper truth and meaning; and this definition applies well to the peculiar dialects of all the "grades of society," from what are called the highest to what are called the lowest. But this subject, though quite relevant to our chief purpose, is only incidental, and the developement of it would require a volume in which it should be treated "in chief;" and, therefore, we shall not pursue it farther.

From the circumstances that have been mentioned,—and they are merely the outlines of a few out of many, *any* reader may at once perceive that there is nothing either in GENERAL IDEAS, that is, the mental feeling of generalization, or in GENERAL TERMS, that is, the words or signs by which we express such ideas in our communications with each other, that can, in any way, be productive of *original* knowledge. Ideas are the memorials of knowledge, and words are the monuments of ideas; and it would not be more absurd to suppose that men originate in tombs and epitaphs, than that knowledge can originate in ideas or in words. As little can knowledge arise from generalization, for generalization is in itself an after-thought; and we must know the particulars before we can generalize. In like manner, our thoughts are not, and cannot be, the original subjects of knowledge; for a thought which had no subject external of the mind would be a thought which had no meaning—not really a thought at all.

When stated in plain words, these are self-evident truths which every one will readily admit; and yet, strange to say, the very opposite has, with very few exceptions, been the opinion of mental philosophers from the earliest records of science down to the present time: and even now it is,

in some form or other, the general opinion of those who think at all upon the subject. By some most singular fatality, mankind have erected their own process of generalization into a soul of divinity — the creator of knowledge; forgetting that the creation of knowledge implies, or comprehends in it, the creation of the subjects of that knowledge. We can form new combinations of thoughts; and we can in many instance put the results of those combinations in execution in machines, processes of art, and other contrivances: but we can no more invent a new element of thought than we can invent a new property of matter, or a new portion of substantive matter itself. To originate a thought in the mind by a simple wish, though not a greater impossibility than to put a thousand pounds in the pocket by the same means, is just as great. The case of the thousand pounds is, indeed, by much the less absurd of the two; for we not only may, but often do, wish to have it; and we do wish, because we have the knowledge and belief that it would add to our enjoyments. So we may also wish for knowledge in a general way; and this is one of the best and most commendable of our desires; but we cannot possibly wish for any particular knowledge — any thought of which we are wholly ignorant. The wish may be parent to the after-thought, but it must be a child of the former one. Yet the opinion, not of mankind generally, but of those philosophers who are not only accounted, but are in reality, among the most profound thinkers and acute reasoners which the history of mankind records, has been, and is, in direct opposition to those very plain and self-evident propositions,—though it is so disguised by the garniture of words, that the fallacy of it is not seen.

The cause of this, in all probability, lies in the fact that

the philosophy of mind had its origin in the schools, and is not of such a nature as that it can be brought to the test of experience by the senses, as we can bring the philosophy of matter. We may remark that the physical philosophy of the schools was as barren of real usefulness as the mental; nor was it until Bacon introduced the inductive mode—the investigation from particular facts to general principles, that it gave man the power over matter which he now possesses. The method of induction is by no means so obvious or so easy in the case of mind as in that of matter, because the elements which correspond to the simple results of observation and experiment, lie in the very beginnings of our mental activity—those first simple thoughts of which not a trace remains in our memory. There is not, probably, a single human being that remembers the first object of which he saw the colour, heard the sound, or touched the substance; and yet the mind must have been educated in thinking, before the affection of the sense could suggest the mental feeling of the object affecting it. This first consciousness of the presence of an object of one or other of the senses, is not the beginning, or near it; and yet, our real analysis of the phenomena of mind, as attainable from the memory of our experience, stops short of this, and we have only a virtual process at that part of the philosophy of mind which answers to the observed facts in the philosophy of matter. Dr. Brown is the Bacon of mental philosophy,—the only man who, unclogged by theory of any kind, has carried the virtual analysis to the real origin of knowledge and thought; but Brown sleeps in an untimely grave, and hitherto we look in vain for a successor worthy of him. The ten years during which he taught in Edinburgh college were all too short for enabling him to make very much impression on the

minds of men; and, for the reason stated in a former section, his published lectures are not adapted to general readers; so that among many, even of those who treat expressly of the philosophy of mind, the old errors are as prevalent as ever; and they give the whole subject the air of a mere philosophic toy, from which the active and practical part of mankind turn away, as from a thing of no value. We want a mental Newton to apply the method of Brown — as *our* Newton applied that of Bacon, to the mechanism of material nature: but where and when shall we find him!

The fallacy to which we allude, and which has existed, from the very earliest time at which we have any record of the mind's being the subject of study, or even conjecture, has taken each of the three forms to which we have made a general but indirect allusion; and the maintainers of the three forms have been distinguished as *Realists*, *Nominalists*, and *Conceptionalists*.

REALISM was long the prevailing doctrine, though there were traces of opposition to it in very early times; and one can easily see why it should have obtained this preference: it agrees the best with superstition and idolatry; and all men in rude ages, and many men in every age, are prone to these. Superstition implies that there is something "placed over," covering, or concealing the real facts of the case, or something believed beyond and superior to all that reason can comprehend. This is the general idol, and if it is set up in the mind, it is really a matter of little moment whether or not a material emblem of any particular modification of it is set up in the temple. The error is not in the material idol, but in the mental belief of which that idol is the unoffending symbol; and there may possibly be in any Christian

church as gross mental idolatry as is to be found in Pagan lands,—though it would be absurd to lay any part of the blame upon Christianity, which is in itself the only system of religion in which there is no superstition.

The Greeks and Romans, from whom—especially the former—we derived the beginnings of all our scholastic philosophy, were remarkable for their proneness to superstition. They were people of passion and poetry much more than of calm reasoning; and thus, in every case where they found their own comprehension fail them they called in the assistance of the gods, until they had a separate divinity for almost every class of subjects or events. If they did this in physical nature, we can easily understand why they must have done something similar in the more abstract subjects of mind and thought; but, as in these there are no physical phenomena, they were not such as to suggest personifications of divinity, which could be represented by statues, or described as having personal forms and habitations. They did, indeed, embody certain modes of mental action,—as, for instance, Minerva was the goddess of wisdom, and Mercury the god of craftiness; yet there was no specific god of thinking or perception. Still, however, there was no want of mental idols upon those mental subjects; and as the mental perception is not a phenomenon of matter, it was perhaps natural, in a superstitious age, to consider that the immediate object of the perception was also not material.

This seems to be the most rational account of the origin of the very singular doctrine of *Realism*, which, from the time of Pythagoras (and we know not how long before) till the eleventh century of the Christian era, kept sole possession of the schools, and which is still the doctrine of the

ignorant — if they can be said to have any doctrine upon a subject which they are so incapable of understanding.

According to that doctrine, we do not, in all cases of generalization, see, or otherwise perceive, the individual object which was presented to the senses. We did not, for instance, see the individual man who stood before us, and whom we called John, or James, or any other *proper* name, but a certain *species* or "appearance," which represented all men, and yet was not one of them, and to which we could not apply any proper name, but merely the *general term* "man;" and, in like manner, there was a really existing "species" in the case of every perception, in addition to the subject perceived and the perceiving mind,— a "*universal à parte rei*,"—a created something, which was yet no individual part of that creation in our knowledge of which it was supposed to perform so very important an office. It is not very easy to imagine any thing more absurd than this; and yet it belongs to the very same delusion as all the false gods with which the fancy of the same races of men peopled external nature,—another form of the very same superstition, and the more inveterate that those idols of species had no material images to represent them.

Absurd as this was, it continued the general belief of philosophers, until, in the eleventh century, Roscelinus and his pupil Abelard propounded the doctrine of *Nominalism*, which made a sort of division among the schoolmen of the day, but waxed fainter and fainter for nearly three hundred years, till it was revived in the fourteenth centry by Occam, a man of extraordinary mental cultivation and boldness, considering the age in which he lived. The violence of the controversy became extreme, not only in the war of words, which was almost the only philosophy of the time, and in

imprecations of divine vengeance, which the parties hurled against each other as being guilty of the unpardonable sin —the sin against the Holy Ghost,—not merely in these, in which, however, they equalled if they did not exceed the ultimate argument of the enraged grammarian, who, after volumes of inkshed, finished the dispute by "God eternally damn you for your theory of impersonal verbs!" a species of logic to which there could be no reply,— but in taking to "the carnal weapon;" and there never was perhaps a more rancourous war than that between Louis XI., the Realist, and Louis of Bavaria, the Nominalist.

As is very often the case in disputes of this nature, where both parties are in the wrong, the Realists and the Nominalists differ much less from each other than the violence of their contentions would lead us to suppose. They both overlook the only important part of the matter in dispute,—the mental feeling of the relation of resemblance which makes us call two or more individuals by the same general name. Realism taught the belief of the existence of real general species or types; and Nominalism denied the existence of these, but transferred the office supposed to be performed by them to the mere names— the general terms, though, as we have endeavoured to show, no word can have any meaning without it is applied, and we must know the subject before we can possibly apply the name. The Nominalist abjures the idol of the Realist, but he does not find the God, and, therefore, in his estimation, the worship is reduced to an idle ceremony. Perhaps this was the natural result of the escape of the mind from the fetters of Realism; for when men escape from any slavery to freedom, they are apt, at the first, to run riot in the exercise of that freedom.

To us, at the present day, this appears to be nothing but

a mere difference of opinion in abstract philosophy, which can have but little influence upon the characters or conduct of mankind one way or another. But when we look at the history, and observe the effects which it had, it becomes far more important. The question is, in fact, a question of extremes,—of the extreme of mental and moral credulity on the one hand, and of scepticism on the other. The Realist was of necessity a superstitious bigot, willing to wear the mental chain himself, and ready to impose all sorts of chains, mental, moral, and physical, upon his fellow-men; and this affected the whole structure and conduct of society. And when we reflect upon the matter, we can easily see why this must have been the case. The mental feeling of the relation of resemblance is the foundation of our whole mental, and through that, of our whole moral character. Consequently, if it is based in superstition and idolatry, the whole character must be tinged with the same; and all the vulgar superstitions—every superstition is vulgar — by what names soever they may be called, are really nothing but modifications of the *universal à parte rei*. Divination, witchcraft, fortune-telling, astrology, the terrors of the night, and all the endless number of formidable but foundationless beliefs, which constitute much of the folly and misery of society, and from which no class of persons is perhaps altogether free, are children of this doctrine, or twin-born with it of that parent of all the various superstitions, ignorance of God, and the nature of the relation in which mankind stand to that August Being.

The Nominalists, as we have said, got rid of the most absurd part of the error, but they did not find the truth,—they, as we said, abjured the idol, but they did not find the God: they denied the existence of the species as something in addition to the whole of the individuals which that

species was supposed to represent; but then they attributed the same office to the general term, or to the idea somewhat mysteriouly involved in this term. But the term or word is by no means so manageable a matter as the *universal à parte rei* of the Realists. The latter, being wholly a matter of fancy or imagination, admitted of being turned to any account that the inventors pleased,—they could believe whatever they chose concerning it, and one part of the belief could not possibly be more absurd than another; and as it was not possibly expressible in language, one person could not very well quarrel with another about any difference of the faith founded upon it, and to admit or deny it altogether were the only states of the question about it. This is the advantage, if advantage it can be called, of all purely gratuitous superstitions,—they keep men in a state of most tranquil ignorance; and it is only upon the inbreak of a little light that this mental stagnation can be at all disturbed.

A word is by no means so tractable as this. It is no doubt a human invention as well as the other; but it is an applied invention, and all those who use the language have a veto in what shall be the meaning, that is, the application of it. It is tied to its subject; and, however willing any man may be, he is not able to break the bond between them. Hence the same belief that was founded on the universal entity *à parte rei*, cannot be founded on the general term; and consequently the tendency of the doctrine of the Nominalists is toward scepticism, not only in all matters which cannot be brought to the test of the senses, but even in those which can be so brought. The greater number of illustrious men among our modern mental philosophers have been Nominalists; and they have been sceptics, either avowedly, or have shown themselves to be

so by the studious avoidal of those points on which their hypothesis would have broken down. Even the profession of the Christian religion, and the practice of the Christian virtues, are incapable of curing this proneness to scepticism, which seems inseparable from the doctrine of the Nominalists. The writings of the amiable and excellent Bishop Berkeley have quite as sceptical a tendency as those of Hobbes and Hume; and though Dr. Campbell and Dugald Stewart do not express the same sceptical opinions, yet they give tolerable significant hints of their own "suspicions" of scepticism by avoiding certain points as safer let alone. Nominalism seems to be the prevailing doctrine among intellectual men, both clerical and laical, and it leads them to avoid various subjects as dangerous, which might be met without fear, and analyzed in the most searching manner, not only without danger, but with the greatest and most permanent satisfaction. The great doctrines of immortality and of the Christian religion, which have an eternal and, therefore, a paramount importance to every human being, are demonstrated in a different way, but they admit of as clear and as easy demonstration as any theorem in the elements of geometry.

In addition to the superstitious credulity of the Realists, and the sceptical uncertainty of the Nominalists, there is a third form of this notion of the essential part of our mental operations — the very foundation, in fact, of all that distinguishes us from those animals which wholly perish with the body, namely, that to which the appellation of *Conceptualism* has been given. Among those British philosophers who have treated of mind and its phenomena, Locke and Reid are the most illustrious, and, indeed, almost the only ones who have held this doctrine. There are, no doubt, traces of it in other philosophers, both

foreign and British: but the two which we have mentioned are the most eminent.

This Conceptual doctrine has often been confounded with the doctrine of the Nominalists, probably because both are equally opposed to the fiction of Realism; but still there is a considerable difference between them. The Conceptual hypothesis is an error as well as the Nominal, only it is not quite so glaring an error. It recognizes a mental process in the fact of one perception suggesting, or calling to memory, a former one, between which and the present one there is a resemblance; but it carries this rather too far, and ascribes to the mental feeling that of which it is in truth incapable. It implies that the mind originates or "creates" the relation—the resemblance or the difference between one subject of perception and another, whereas the mind can in truth do no such thing. The resemblance or the difference must exist in the subjects themelves, and the mind can no more invent or originate the fact of two subjects of thought being alike or not alike than it can originate those subjects themselves.

It is thus evident the Conceptualists saw the fallacy of both the other hypotheses,— the redundancy, on the one hand, of believing and founding their doctrine upon that which does not exist, and the deficiency, on the other hand, of leaving out the whole mental process, and making the result of the comparison instantly to "answer to its name," like a soldier at roll-call, without that process of comparison but for which there could, in truth, be no comparison at all. It is in this process, and this only, that the real function or act of the mind consists; for every thing else is mere feeling, and as such it would pass away without producing any effect or leaving the slightest memorial.

To take a simple instance: we examined the roses of a

former summer; they made certain impressions on our senses, say those of sight and smelling; and those impressions, being pleasurable ones on which we loved to dwell for a time, were communicated to the mind — we had a mental feeling of them; but upon the simple and single instance we could have nothing more. If this had been the first time that we had seen the flowers, and nobody had told us their names, would — could we have at once called them roses? Assuredly no. Well, suppose that we had not only been told the simple name, but had been informed of every thing respecting the natural history and the artificial culture of roses, and that we had had the momentary feeling of it all. Thus informed, we pass the winter, when the rose trees are leafless; but in due time we again behold the roses of the present year; and we at once pronounce that they are roses, and point out all the varieties which were formerly explained to us. We knew that the blossoms of the former year were roses, upon the faith of the testimony of our informant; but our informant is not beside us this year; and so, how came we to conclude that the present blossoms are roses? "We can at once see that they are roses," would be anybody or everybody's answer. But it is not from the mere fact of our seeing them that we know that they are roses; for on our first sight of them, when we had no knowledge of what they were, or by what name to call them, they were just as well seen as they could possibly be on any future occasion; or if the future sight of them were imperfect, we should remain doubtful whether we had upon that particular occasion actually seen roses. We are so constituted, too, that, considered merely in itself, the first sight makes the strongest impression on us; and mere novelty excites the desire of knowing without the assistance of any other feeling,— it is in fact one of our

principal stimuli to improvement, and as such one of our most valuable endowments.

Now, the seeing is the very same in kind in the second instance as in the first, and for the reason just stated, the probability is that it is weaker in degree; therefore, if the mere sight of roses, or of any thing else, is to suggest the name, then the very first sight is the one most likely to do it; but that is the time upon which our mental state is merely the wish for knowledge; and a wish never can be gratified without the use of means. The two sights are, in themselves, just as unconnected as if the one of them were obtained by one person here and another person at the antipodes. The connexion—that which brings them together, compares them, and judges of them—is the essential and important part of the matter, the only part of the process which is truly mental; and, in one or other of its modifications, the only mental process of which we have any knowledge.

It is this which is left out by the Nominalists, not in as many words certainly, for it would be very strange if they were to deny in express terms the existence of that of which they are professedly describing the phenomena. But their view of the perceiving of resemblance or difference leaves out the mental part of the process altogether, and this is tantamount to a real though not a verbal denial of its existence,—as it is saying that it is useless, and there are no useless parts of creation. This is the real cause of that scepticism which is inseparable from the doctrine of Nominalism; and which when carried to the full length tends to the denial and the verbal proof of the non-existence both of mind and of matter. Such is the tendency of the doctrines of Berkeley, and if *he* fell into this, the foundation upon which it is attempted to be built must be a very unsafe one

for ordinary men. One can from this feel the philosophic truth as well as the satiric point of Byron's remark —

> "When Bishop Berkeley said 'there was no matter,'
> I think there was no matter what he said."

At some remote period, when the subject of mind comes to be studied with that attention which its importance deserves and demands, it will be an especial marvel that Hume, and Hume's most powerful and successful opponent, Dr. Campbell, should have been both believers in that which is the very essence of scepticism; and yet such is the fact.

The Conceptualists saw that there was error in this, and labouring to supply the deficiency, they avoided it, by ascribing to the mind not only the act of perceiving the relation, but actually the ground of the relation itself. They did not say this in so many words, because if they had at once come to the evidence of the senses, and said that "one sparrow is like another sparrow, *because* we think them like," the fallacy would have been too palpable; but when they considered the whole process as a *conception*, that is, as something *originated* wholly by the mind, they in fact said the same thing; and thus, by over-correcting the error of the Nominalists, they produced a foundation for another form of the very same scepticism, it being just as easy to argue for the non-existence of matter, upon the ground that all our perceptions of resemblance and difference are conceived or produced by the mind alone, as it is upon the Nominal hypothesis, in which the act of the mind is left out of the question.

The real matter is so very simple and easy to be understood, that one cannot help wondering why there could have been so many mistakes and so much disputation con-

cerning it; but they who made those mistakes and carried on these disputes were among the most learned and acute of the human race, and their characters in all matters were such as to prevent the least doubt that they were all equally zealous for the truth, and the truth only. It may seem a little out of the way to have taken so much notice of these philosophic differences and disputes, in a popular work of this nature; but the writings of these very philosophers, notwithstanding their errors, are the ones in which the phenomena of mind can be studied to the greatest advantage; and they are at the same time highly valuable as models of the style of language, and the best mode of conducting an argument, or an investigation of the truth. Their logic is in general quite perfect, even in those parts where they are wrong; and their writings are incomparably better as a mental exercise than the feeble and disjointed compositions of those who serve up the gossip of the time for the purpose of enabling the idle to bear the burthen of that life of which they are unworthy. These errors are all in the assumed premises — the foundation upon which the structure is built; and, unless it is built so high as that those unsound foundations give way under it, we may contemplate the symmetry of the structure with great profit and pleasure. The fact is, that those errors are not dangerous, or at all events the danger of them is not felt so long as we continue mere speculative philosophers. Speculation of this nature is always quite harmless in itself, and so indeed is the foulest wish that man can entertain, so long as it continues to be nothing more than an unexpressed wish. But in the case of the criminal wish, the crime may be said to be committed in a moral point of view, whenever the wish has become so strong as that the party "sees his way" to the carrying of it into effect; because, in all the

subsequent part, up to the outward fact, the party, as will be shown afterwards, is at the mercy of circumstances, and cannot bar the effect. The word wish is from the verb "wisan," to know; and means that the wishing party has the knowledge of a certain result of some kind or other, and a desire that this result should be brought about. Will is "wayal," that is, the belief that the way to the result which is wished, "wised," or known, is perceived; and even if the will is of that decided character which we call determination, the meaning is not much altered. The word "determination," literally means "of the ending," that is, that the chief desire is directed to the ending—*terminationis*, of the matter, whatever it may be.

Errors in speculative philosophy do not produce the same moral taint, as wishes and willings to perpetrate evil deeds; and if the parties keep them to themselves, they do not occasion any injury to the rest of the world. But there is a time at which speculation must cease, that is, when we *must* think of what is to be our condition when the term of our life in the present world is at an end; and the feeling that when the breath expires, and the offices of the senses are at an end, we shall know no more, involves in it so much of pain and horror, that the most stubborn of us could not endure it for a single day. What tends greatly to augment the agony of any thing that shall bring this fearful feeling of annihilation upon the mind in the extreme of pain and peril, when the world and all its enjoyments are no more to the body, is that the senses cease to bring in their intelligence, and the mind is thrown wholly upon its own suggestions, without any hope or consolation from the world of matter. What have been the possessions or enjoyments in the world is of very little moment, at this fearful time — fearful only to those who have had the eternal

hopes of their minds shattered by such erroneous articles of belief as those which we have now detailed. It is of little avail to say that we do not see the expression of the ultimate agony which these misgivings of the mental hope in the hour of our extreme tribulation must necessarily produce; for, while there is the consciousness of sensation in the body, whether of a pleasurable or a painful nature, and however grievous the latter may be, there is still some lingering of hope in the world; and while the consciousness of pain is felt, it continues to be accompanied with the desire, and also with the hope of relief from it, that is, with an expectation of recovering, and revisiting the scenes, not only of former exploits, but of the joys of youth, which crowd somewhat painfully upon the mind at the time when its connexion with the body is about to be dissolved. The fearful moments for the mind are those in which the body can give no sign of the manner in which it is acting; and in respect of the mental anguish it is really of but small consequence whether those moments are few or many. We have had occasion to remark, again and again, that time, as we measure it by the movements and successions of material nature, is not an element in the action, and consequently not in the joy or the sorrow, the ecstacy or the agony, of the mind; and a single instant of the mental torment which the absence of hope at the time to which we are alluding may occasion, may wound more deeply than a whole eternity of such torments as we can imagine to be inflicted upon the body by material means.

While we are in life and in health, we can have no complete or positive experience of this fearful state; but there are glimpses, even to those who are almost absolute sceptics, which give us a sort of dreamy information of it. The day, generally speaking, diverts us, both by the multiplicity and

the endless variety of subjects which it presents to our senses; but there are pauses in the night,—especially when we are abroad and alone, seeing the moon and the other glories of the sky,—as to which we feel that it would be agony not bearable to have a firm belief that a day would come upon which we should be deprived of them for ever—should go into utter oblivion, in which all those glorious works of our God should be for ever lost to us, and that we should pass away "like the morning cloud or the early dew," and be as extinct as the idle foot-print on the sea-beaten sand, after the tidal motion of the water has flowed and ebbed over it. Shakspeare, the wonderful depth of whose philosophy forms the grand charm of his poety, though perhaps all his readers may not have a full perception of the fact, has, in his play of "Henry VIII.," thrown a touch, and a mere touch, of this into the speech of Queen Catharine, when she ascertained from the words of Wolsey and Campius that her doom was sealed, despite any justification of her conduct which she might be enabled to adduce and to substantiate by evidence.

"Ye turn me into nothing,"

says the high-spirited and much-injured queen; and though the allusion is to the certain annihilation of all her royal state, yet there is in it an allusion to that more full, final, and fearful "turning into nothing," which, if it should come in the force of a full belief, levels all distinction as to what we have been, and falls with an equally withering blight upon king and beggar — upon philosopher and fool. All the torments which language can name are really nothing to one instant of this; and although we can have no certain demonstration of the fact, the probability is that this is the suggesting feeling in cases of self-murder—the wounded spirit which none can bear.

We do not say that the sapping of the foundations of hope, which is involved in the doctrine of the Nominalists, must of necessity lead to this fearful result — this total abandonment of the mind, when the eye is closing and the ear becoming deaf for ever; but it breaks down the barrier, and leaves no security that such shall not be the case. Nor must it be imagined that the consolations of religion can be any security against this; for if this scepticism takes hold upon the mind, the corner-stone of religion itself is taken away; and, whatever may be our professions or our practice, the essence of our religion can never be more than a painful blending of desire and fear — there is always one dark portion of the subject into which we dare not look.

It is not necessary to the purpose of mental philosophy to go at any length into this subject; and indeed it belongs to the philosophy of the Emotions, of which we do not intend to treat in this volume, rather than to that of the purely intellectual states. But, as this is the ultimate result to which the whole matter tends, one or two additional remarks may not be either irrelevant or unimportant.

Now, in the first place, the security of most men consists in their ignorance of the matter, and in that only; for, as there is no intrinsic meaning in words, it may be very possible for a man to read all that has been written upon the subject of the mind and the question of its immortality, and to agree most learnedly and logically concerning them, and yet have no very clear understanding of their import. There is a mental process between the mere words and the subjects of which those words are the signs—a relation to be traced; and if this is not done, the words may be carried on to any extent of apparent knowledge, while the party is in total ignorance of the matter about which

he speaks or writes. But though this ignorance is an opiate to the mind as long as it remains, there is no security that it shall remain at the time when we stand the most in need of it. The doubt or immortality—the dread of certain annihilation, is involved in the sceptical part of the Nominal hypothesis; and that hypothesis, if it enters much into our trains of thought, may be the means of suggesting it; but there is also a natural means, from which no human being whose mind is so enlightened as to be capable of thinking of death and futurity at all, is secure. The feeling of our own existence is the primary feeling, anterior to all knowledge acquired from without, and present in all thought and action of which we are conscious. But, as contrast or contrariety is one of the means of simple suggestion, the very feeling of immortality almost necessarily suggests that of annihilation; and unless the feeling of immortality is established by proof—made a truth to the mind, there is no security that its opposite shall not at some time get the mastery; and the times at which we are in most danger of this are those at which the hopes of the world desert us, and we are thrown upon the mind as our only stay and resource.

In the second place, if this feeling of immortality is not a demonstrated truth, our religion, our morality, and indeed our whole character, must be tinged with hypocrisy; and this is a taint which, once given, deepens, and cannot be eradicated by any effort on our part. If the feeling, or even the fear be that the present world is our only portion, then the very principle of our nature which leads us to seek our own happiness, must necessarily prompt us to make the most of this portion by every means that we can command. Thus we have no restraint upon us but the opinion and the laws of society; and although most men

find it their interest to pay deference to these in public, and the tendency to do so may be strengthened by habit, yet neither public opinion nor law can reach us in the very cases in which restraint is most necessary — that is, in the formation of our secret purposes. There is nothing that can reach and control us in these but the full conviction of the truth of the eternal continuity of our mental feeling; and thus we go on to the execution of our purposes in spite of the world, if we have the power, or by stealth and concealment from it if we have not; and thus, tyranny on the one hand, and hypocrisy on the other, in all the variety of shade which they can assume, are the natural consequences of our being sceptical upon this important subject.

The remaining modifications of those suggestions of relation in which there is no necessary reference to the succession of time, namely, those of degree, proportion, and comprehension, need not occupy us long, for they follow the very same laws as suggestions of resemblance and difference, and may be considered as combinations or modifications of these, as applied to particular cases. They are all the results of comparison; and when degree or proportion is the relation, the subjects compared must be of the same kind, that is, measurable by some common standard. We can apply them in a general way to all things, qualities, actions, and whatever else is capable of comparison, though there are many cases in which we cannot exactly apply a standard. Degree relates to the difference in quantity or measure, either between two subjects, or between one of them and the standard to which we refer, that standard always being one of our own choosing. Proportion is the result of the comparison of the whole quantity or measure of one subject with that of

another, both of the same kind, and estimated in terms of the same standard; and comprehensiveness is the relation of a whole to the various parts of which that whole consists, whether those parts be of the same kind or not.

These are considerations which belong to the philosophy of matter rather than to that of mind, though we apply them figuratively to mental states. They are the foundations of the mathematical sciences, by means of which we estimate quantity or value of every kind, and are enabled to adapt matters properly to each other in all the arts and the business of life. Proportion is the most important of them, both in our reasonings and the applications of those reasonings; because, in proportion, there is always a distinct comparison of two quantities or subjects; and the result of the comparison is a general truth, not dependent on the existence of any particular subjects, but equally applicable to all, and capable of being expressed by a number, or of being understood as if it were so expressed. All names of numbers are signs of relations—of the relations of particular numbers to the number *one*; and we say that one proportion is equal to another, or greater or less, according as it is expressible by an equal number, by a greater number, or by a lesser,—the nature of the subjects, and their absolute magnitude or value, not having any effect on the value of the proportion.

SECTION XVI.

RELATIONS OF SUCCESSION.

RELATIVE suggestions of succession have been already mentioned as those which involve the consideration of time; and they differ in some important respects from relations of co-existence. In these last, the feelings or perceptions of the two subjects are brought into immediate juxta-position, either by being immediately present to the senses, by an impression on the sense suggesting the memory of a former thought, or by one thought suggesting the memory of another; and, besides the simple perception or suggestion of the two subjects, there is a mental process which may virtually be analysed into three parts; first, a wish to know what relation there is between the subjects; secondly, a comparison; and thirdly, the result of this comparison. The accuracy of the result, and the rapidity with which the whole process is completed, which is quite momentary in one who has the requisite preparation, depends upon the knowledge of the comparer, and his habit of comparing, jointly; but in every case the impressions of both subjects must be present to the mind in one or another of the ways that have been mentioned.

Relations which involve the idea of time or succession differ from these. The mere succession is not the relation; for the fact of one subject being mentally perceived or even naturally existing before another, does not imply any neces-

sary relation between them. But still it removes the case out of the class of general comparisons, inasmuch as two subjects considered in succession, cannot, at the same time, be considered in juxta-position. It is not necessary that they should be of the same kind, neither is it sought to discover how they agree or differ in their nature, their properties, or their appearances.

The most important relation involving the idea of succession is that of Cause and Effect; and it is almost the only one to which we shall require to advert. What we call a cause and an effect always must follow in order, first the cause, and then the effect in succession to it. But the mere fact of this invariable order of succession is not the causation, otherwise every succession in order would be a case of cause and effect, which it is not. The Nominalists, indeed, say that we can see nothing in any instance of causation, but the fact of one event following another with "constant and invariable sequence;" but as little can we "see" any relation of resemblance, difference, or any thing else in any two objects; we see merely the two objects, or rather first the one and then the other, in sequence, very much in the same way as we see the sequence of cause and effect. But there is an act of the mind in both cases, consisting of a desire of information, the use of a means of information, and a result, which may be either success or failure, according to the circumstances of the particular case.

There cannot be sequences more constant than to-morrow always following to-day, and the ebbing of the sea always succeeding the flood; and yet nobody would call to-day the cause of to-morrow, or the high water of the sea the cause of the low water. Life, too, is succeeded by death in all material creatures; and yet life is surely not

the cause of death. No doubt, if there were no previous life there could be no dying; but as little could there be any dying if that life were to continue. Countless other instances might be given, in which there is constant sequence—more constant than there is in many cases where we do feel that there is causation—and yet in which there is no causation; and, therefore, mere sequence cannot possibly be causation.

There is another limitation; no substance or being, considered merely in its existence, without regard to its properties and its phenomena, can be considered either as a cause or as an effect. Matter cannot be the cause of matter, mind cannot be the cause of mind, neither can the one of them be the cause of the other. We often, indeed, by a sort of personification—a figurative transfer to the senses of that which is wholly mental in itself, made for the purpose of more certainly and readily affecting those to whom we address ourselves (which is the object in all personifications,) designate a being or a substance a cause: but, notwithstanding this, the real causation — the fact from which we infer a cause, is always an *action* of some kind or other; and the effect is the result of that action. In the material world we cannot even think of this as the primary and total beginning of any one material substance. An oak grows to be a large tree from an acorn: from the germ of that acorn, through a succession of unnumbered generations of oaks,— from any number of them, in all of which, save the one which immediately produces the acorn, the young oak which first appears as an independent member of the oak family when that acorn is so far matured as that it can germinate, is not in any way an object of our senses. By the time that it attains its full size, in a soil and situation favourable for its most vigorous growth, it

contains many million times the quantity of matter which it does when the eye is first able to trace the rudiment of it in the young wood. At that early time, it contains an individual vegetative principle — a principle without which there can be no oak tree; and when the acorn is matured, the *decidua*, which so mysteriously links generation with generation as to be in itself no bad emblem of that connexion which we call causation, parts, and the germ is committed to the care of the elements, an independent vegetable, ready to act whenever the circumstances are favourable for its acting. We cannot say that this young life in the acorn is the cause of the future oak; but it is one of the causes; and it is the sole cause why the tree is an oak, and not a beech, a pine, or any other species. But it does not, of itself, come causeless,—it is an effect, and the same may be said of all the other causes which co-operate with it in the germination of the acorn, and the growth of the future oak.

But though there are thus various concurrent causes, of which the growth of the tree, and also the size which it attains, are the effects; and one particular cause among the rest, namely, the specific action of the germ, which determines that the tree shall be an oak, and not any other species; yet nobody ever imagines that any one of these causes, or all of them together, constitutes the *original* cause of one single particle of the matter which is found in the full-grown oak. They are the causes of its being brought there, and of its assuming the particular organization, arrangement, and consistency, which we find in the several parts; but we cannot even think of the matter of which the whole is composed, without a feeling that, from what source soever it may have been derived, every particle of it must have been pre-existent to the tree. It is the same

in the case of every object and every new form that matter assumes by physical causes, whether natural or artificial; we cannot possibly imagine the operation of any one of these causes, or of any number of them jointly, in any one particular instance, without the thought, the irresistible feeling, that there is pre-existent matter upon which the cause or causes act.

Even those causes themselves, when we carry the analysis backwards only a single step, all resolve themselves into results or effects of former causes; and these again resolve themselves into others, let us carry the analysis backward to what extent we may. In the whole of nature, and of art as forming natural materials into new combinations or new arrangements or shapes, we find no instance of *single production*, or of one simple and unanalysable cause, producing an effect of itself and unaided by something else; and even in those cases in which we are not able to refer the active part of the causation to any particular being or substance, we cannot divest ourselves of the idea that there must have been such active or causing substance or being; and we never have the least doubt that the matter on which this agent in causation produced the effect which we observe, must have existed, in some form or other, previous to the operation of the active cause. Thus, when we trace that portion of the natural cause of the tree which determines that tree to be an oak and not another species, back to the origin of the tree as an individual in the succession of oaks, we come to an action in which there are two subjects concerned, both of which are specially prepared, though by causes which we cannot very well understand, for the accomplishment of this particular act. They are the fertilizing and the fertilized parts of the flower, which, when their specific purpose is accom-

plished, decay, and yield up their substance to the common mass of matter, much sooner than the leaves or other annual parts of the deciduous oak.

But though, without this process of the action of the one of these parts upon the other, there can be no acorn from which an oak can spring, and though their act is thus the immediate cause of the fertilizing of the acorn, yet the act of fertilizing is in itself not a cause, but an effect. It is the same with the parts which act upon each other,—they are the effects of a certain physiological property of the tree, traceable backwards through the growth of the tree, till we can come to the former instance of the same kind of action of the same kind of parts that fertilized the acorn out of which the tree grew. This is one generation or cycle of the action and developement of that physiological principle in the tree which determines it to be an oak; and though we carry our consideration backward to ever so many of these cycles, they are still the same, and we gain no more information from the first of ten thousand instances than we do from the last—from the oak which is present to our observation. We find nothing but a certain succession of *results*, which occur in the same order in every cycle, or generation of the oak—a succession of changes, to which we can assign no beginning, nor, in so far as the specific character is concerned, can we trace them to any substance or power of matter but the oak itself. The degree of growth, the size, and many other appearances which give to any one oak that individual character by which we are enabled to distinguish it from other oaks, all depend upon the situation, the soil, and the other circumstances in which the individual tree is placed; but there is a certain specific character which we can trace to no natural cause, either in the contemporary circumstances

of the individual tree, or in any succession of its generations; and it is because of this character that one oak becomes the representative of all oaks, and the name "oak" becomes a general term.

This specific character of the oak cannot be said to have any constant representative in any portion of matter, which we can separate by an actual process, or which we can ever define by a virtual analysis. It is traceable in all parts of the individual, in whatever state of developement that individual may be, from the act of fertilization to the latest symptom of vegetable life: and even when that life has ceased, we can trace the evidences of the action of this specific principle, until the timber of the oak becomes an inorganic mass; and even then we are able to say that the mass is vegetable matter, that is, has at a former time been the substance of a living vegetable.

But, even in the most rudimental display of this principle, as specifying the existence of an individual in the succession, there is matter prepared on which it may work. There is an embryoic rudiment of the acorn, before the act of fertilization; and means are even there prepared by which, if the act of fertilization takes place, and no casualty ensues, the matured acorn shall in due time be separated from the parent oak, not by division of parts, such as we are obliged to practise when we propagate a plant by a cutting, but by a natural parting, in which both the oak and the acorn are healed at those surfaces which were formerly in communication; and the part of the oak from which one acorn is thus separated never can produce another one. This applies not only to the individual point of a twig upon which the acorn was produced, but in a seasonal oak, and in every seasonal tree, which sheds its leaves and has a winter to rest, it applies to the whole growth of that

season to which the acorn belongs. No part of the produce of that growth can again originate an acorn; and if, in any instance, there shall be two productions of acorns in the course of the same year, there are two distinct actions of all that portion of the tree which is immediately concerned in the production of them.

In the growth of the whole of the tree, independently altogether of the acorns which it produces, there is a compound action, very different in the acting organs, but still resembling in principle that which takes place in the fertilizing of the embryo acorn. Whenever there is a growth of vegetable matter, that is, an accumulation of matter by a vegetable, whether obtained from the earth, the air, or any other source, there is always an application of membrane to membrane at the commencement of the process. In the accumulation of wood upon the trunk and branches of an ordinary tree, the first action of the year is between the outer surface of the wood and the inner surface of the bark; and in the free air, neither of these can act in growth without the other; but if we apply the inner surface of instantly removed and uninjured bark to the external surface of wood in the same state, if the trees have the same general habit, then the two will adhere and grow, in the same manner as if they were both parts of the same individual. But the wood will not alone unite with the wood, neither will the bark alone unite with the bark, even in portions of the same tree, unless there be both wood and bark in each of the surfaces which are brought into contact. In these cases we are unable to say whether the surface of the wood or that of the bark contributes most to the action of growth; and in the act of fertilization of the germ of an acorn or any other seed, we cannot say which of the two parts of the flower on which that operation depends has the

most influence on its success. When insects or parasitical fungi render the flower abortive, they always do it by attacking the germ; and when the fertility is destroyed by the weather, the part which is injured is generally that which fertilizes the other.

Thus, though we are so constituted that we regard every change which we observe in matter as an instance of causation, and refer it to a cause, we have much difficulty in defining that cause so as to render it a subject of perception, in any other way than as the means by which the effect which we perceive, and from which we infer that there has been a cause in operation, has been brought about. There is nothing that we can say is a self-originating change, or even refer to it as one. There is an agent and an object in every one of them; and there is something more than this—an *action*, as we say, performed *by* the agent and *upon* the object. Nor does the chain of causation (it is something more than one of mere succession, or sequence) stop here; for, we can trace both the agent and the object backwards, and, at the very first step of our examination, we find them both in the situation of effects of former causes. Nor is it different with the *energy*, the *operating principle*, or whatever we may call that which gives us the mental perception of causation, in addition to the simple perception of the two subjects which, in consequence of this peculiar relation of succession which we feel them to have, we call the cause and the effect. In no one case can we regard it as a *first* action, any more than we can regard the material body, from the observed change of which we infer the action, as a *first* substance. When we refer to action as a subject of thought, and designate it by a name, or *noun*, as grammarians call it, we always regard it as an effect, and can no more separate from the mental feeling of

it, the belief that it must have had a cause, then we can separate from our sensations or thoughts, the belief that they are ours and not those of others.

It matters not what the action may be, whether it be that of life in an animal or a vegetable, the action of heat, light, electricity, one substance chemically upon another, or any other nameable kind of that general production or change which we call action; for in every case we find it utterly impossible to divest ourselves of the belief of a cause. And, in every case in which we can make a real analysis, we find that that which we term the active or operative principle in the cause is, like the effect itself, really nothing but a change, a transfer of energy from one state of matter to another, without addition or subtraction, just as the growth of a tree, or the aggregation of any other subject, is a mere transfer of matter from some other subject or subjects, in which the very same matter previously existed.

Thus, when a team of horses draw a waggon loaded with coals from the wharf or other store of the merchant to the house of his customer, we say, in common language, that the fact of the horses being made to exert their muscular strength in a particular way, is the cause of the transfer of the waggon and its load. But though we say this, we never for a moment suppose that there is any original production of muscular strength in the fact of the horses drawing the waggon. There is a display of it, no doubt; but instead of any production — instead of the horses becoming stronger the longer they draw the load, they become weaker, become exhausted, and if it were possible to continue them in this state of exertion beyond a certain time and degree, they would be destroyed. The exertion of the horses in drawing the waggon is merely a

transfer of action, one part of which moves the waggon and its load, and another overcomes the resistance of the path along which the waggon is drawn, and the abrasion or wearing down of the pavement and the tires and the axles and bushes of the wheels. In every case which we can possibly examine, it is the same,—the energy of the agent at last becomes exhausted, so that it can no longer perform its functions; and hence the beauty and the benignity of those means of the succession of races, by which the earth is kept clothed with plants and inhabited by animals to the full extent that it can bear. Even the surface of the earth itself is in a state of continual change, and presents nothing to our view but what we must consider as an effect, though in none of these changes can we imagine that there is the smallest particle added to or taken from the whole quantity of terrestrial matter. We seek in vain in matter for any thing that we can regard as the cause of matter; and when we seek for the cause of action as distinguished from substantive existence, our inquiry is equally fruitless. What the particular result, in the cases which we make the subjects of our inquiry is, is matter of small importance. It may be change of position, change of place, or any of the countless varieties of changes of form or appearance. We have an instance of mere change of position in the rotation of the earth, which is not necessarily connected with the displacement or the change of a single particle of matter. We have an instance of the second in the annual motion of the earth round the sun, which does not imply the slightest change in the relative places or the natures of terrestrial objects. Every object that we can examine, furnishes us with an instance of the third; and, in a greater or smaller number of those objects, according to the extent of our experience, we can name

the immediate causes of the states in which those objects appear to us; but in no one of them can we arrive at the original cause.

In the case of the rotation of the earth upon its axis, and its revolution round the sun, we cannot take a single step backward in the succession of causation,—we cannot tell, or even imagine, what is the immediate cause of either the action by which it was preceded and without which it would not have been. Great men have sometimes dreamed dreams upon this subject, and when they do dream, such men are always the greatest of all dreamers; for, though there are no data which can enable us to say that these dreams are false, we are equally without any thing that can enable us to say that they are true. Upon subjects of which we are utterly ignorant, there can neither be falsehood nor truth.

But still, our utter ignorance, even of one step in the chain of causation, does not in the least affect our belief that there must be a cause. We can no more separate the rotation of the earth upon its axis, and its revolution in space round the sun, from the belief that such has, or must have had, a cause, than we can believe that the waggon wheel turns round upon the axle, and the waggon proceeds along the streets, without any cause of motion.

The belief is thus universal; and being so, "cause" and "causation" are by far too general terms for admitting of any definition; and the fact of causation, though one of irresistible belief, is equally incapable of proof with the belief of our own existence. We cannot give what is called a logical demonstration as proof of a general truth, in any truth or number of truths less general; for what we call the general truth, is a mental inference from the relation observed among certain particular truths; and, ex-

cepting in so far as it is a relation among these truths, and as such a perception or feeling of the mind, in which the senses can take no part, it has no existence.

Causation, like all other subjects of knowledge, is discoverable only by observation; and the mind can no more add a new cause than it can produce new matter or new properties of matter. When the material world, or any thing connected with it, enters into the case, there must be observation, so as to produce the mental feeling of the existence of the subjects; and there must be the mental process of comparison, the object of which is the discovery of a relation. In this last, the senses have no necessary part to act, though there may be repeated appeals to them before the result of the comparison can be arrived at, or even before the comparison itself can be made. Indeed, the necessity of any appeal to the senses is only in making the comparison; for if we are enabled to do that, the feeling of the relation is a matter of necessity, whatever that relation may be,—whether cause and effect, or any other.

If we have no experience of a parallel case to any observed one, in which, seeing the effect, we desire to know the cause, or, knowing the cause, we desire to know the effect, then there is a member of the comparison wanting; and until we find out that member by some means or other, we cannot arrive at the knowledge of any relation, without observation or experiment, or both, according to the nature of the case. Even when we have actually had former experience of parallel ones, this experience does not always come to our assistance when we wish for it; and when it does not we have no alternative but to appeal to the senses, to observation, or to experience, as the case may require.

Every internal affection of the mind,—every suggestion, of what kind soever it may be, is in itself an instance of

cause and effect. The present perception of an object of the senses, or some mental suggestion which must itself have a cause, is the *cause* of the return of the suggested thought; and as there must always be sufficient energy in the cause to produce the effect—whether we are able to call that energy by a separate name or not, it depends on the degree of desire produced by the suggesting state of the mind, whether it shall or shall not be able to call the other from the oblivion of the past. If it is not there, to answer to the call, we are of course in the condition of Hotspur, or "any man" not believing in incantations, in calling "spirits from the vasty deep;" though it is possible, also, to be tainted with the superstition of Owen Glendower, and to *fancy* that the spirits obey our call.

But, if we are in sober possession of our minds, that is, if the imputation of effects to superstitious causes has not become a habit with us, we never can decide an entirely new and unexperienced case of a relation, without direct observation or experiment; and this is the reason why the schoolmen, notwithstanding their acuteness and their diligence, never added one single truth to the volume of human knowledge, though the discovery of truth was the object with them all. There is something more remarkable in this case,—something which is well worthy the attention of every one who is anxious to know by what means he may become well-informed himself, or how the same estimable result may be promoted in others. The objects which the alchymists had in view—the transmutation of the cheaper and more abundant metals into gold, the discovery of the philosopher's stone, and that of the universal solvent, were in themselves madness as compared with the professed objects of the schoolmen. But the alchymists were experimenters on natural substances: they went—with

most ridiculous expectations no doubt, but still they went to that field in which alone additions to knowledge are to be found; and accordingly, though they, as matter of course, failed in the obtaining of one and all of the results at which they sought to arrive, they laid the foundation of that splendid fabric of chemical science which, in modern times, and since the theoretical fooleries of the alchymists have been abandoned, has been of such vast service in the arts, and has so mightily increased the power of man over matter, and so multiplied the comforts of human life. The alchymists did not find one of those objects for the obtaining of which they performed their experiments; but their very want of success in this respect was the grand cause of their usefulness. They examined a great number of substances, and found out properties of these, and also results of their action upon each other, which, in all probability, would never have been thought of in the ordinary course of the arts; and thus they laid a sure foundation for one of the most important of sciences, without being themselves aware of the great benefit which they were conferring on mankind. The same may be said of the labours of the astrologers; for had they not sought to read the destinies of men in the aspects of the heavenly bodies, it is highly probable that the science of astronomy would never have arrived at its present state of perfection, or given, as it now does, the same certainty to the path of the mariner on the trackless ocean, as the traveller has upon land.

Now, all these discoveries, and indeed all discoveries that can be named or imagined, which extend beyond the mere perception of objects by the senses, without any reference to their use, which cannot be admitted into the list of valuable discoveries at all,—all discoveries resolve themselves into mental perceptions of the relation of cause and

effect in one or other of its countless modifications; and thus the relation of cause and effect is the most important one in which the mind can be engaged—the foundation of every science and of every art, and the grand rule of our proceeding in every thing we do.

Hence, in order that we may have any thing like correct notions of the operations and the use of the mind, it is necessary that we should fully and deeply understand this relation of cause and effect, the only successional relation which is of much value to us in the process of reasoning; for mere succession in the order of time is not a useful relation; and, indeed, not a relation to all, though very many of the errors in thought, and blunders in action, which we commit, are founded upon our mistaking it for such. The whole train of the superstitious belief that certain phenomena of external nature have an influence on the events of human life, originate in ignorance on the subject of cause and effect, and in the machinations of the crafty in turning this ignorance to advantage, in increasing their power over the rest of mankind, and thereby augmenting their gains.

In rude and ignorant states of society these delusions are universal, and in all probability deceive even the impostors who profit by them; and even as society advances, these, though, in the judgment of sober reason, they are the most palpable of all the evils of ignorance, are the most stubborn to be subdued, and the last to give way. Eclipses and comets are not yet relieved from the trouble which, of old, they were universally believed to take in regulating the fate of battles and of nations; and so far from the influences which the aspect of the stars at the time of a man's birth have on his destiny through life being scouted as they ought to be, there are still, even in the British capital, impostors who make their gains by the casting of

nativities. It is only two or three years since, upon the demise of one of the technical conjurors, who, I was told, was an adept in the art of making nothing look like something, by the technical jargon with which he filled up the otherwise vacant scroll, a grave proposal was made to me to become his successor in the witchcraft; and I was assured that the half-fees of all the nativities applied for from different parts of the kingdom in the course of the year, would amount to a very handsome sum.

Nay, even at the moment I am writing, there is an imposture, not of the same kind exactly, but still very analogous, by which thousands of the people are gulled. This is "The Weather Almanac," set forth by a person of the name of Murphy. Of thirty-eight days of 1838, which have elapsed, the prediction of the Almanack is decidedly wrong in twenty-five, and partially wrong in the rest, except the 20th of January, on which the necromancer is only hypothetically right, that on that day the winter temperature may probably be the lowest. The whole character of the weather, as set forth in this imposture, is obviously different from that which actually took place. January begins with "frost;" and there was no frost till the evening of the seventh. Three days of January are "rain;" but not a drop fell in the whole month. Eight days of the same month are "changeable;" whereas, according to the necromancer's own definition, there was not one changeable day in it. So also of the first nine days of February, four are marked "changeable," and three "rain;" whereas there was not one of them "changeable" according to his definition, neither was there any rain except a few drops in London, on Tuesday the 7th, and then it did not extend beyond the range of the artificial heat, which, acting upon a cold atmosphere, of course occasioned it.

A matter of this kind may seem too contemptible for notice in a work, however light, professing to treat of mind. But it is not so: the great use of the study of this important subject, is the guarding of mankind against imposture; and the extent to which even those moderately educated upon other subjects were gulled by the nonsense of this Sidrophel, shows how much need there is for popular information upon this particular doctrine of cause and effect.

The main cause of this gulling is neither new nor obscure. Five pages of preface, and twenty-six pages of "Scientific (!) notices," are so expressed that they neither contain one truth nor one falsehood. They are pure and unadulterated nonsense; and if the author knows any thing whatever about those natural causes which really do influence the changes of the atmosphere, he has been singularly successful in concealing this fact from his readers. One short passage is so exquisitely nonsensical as to be worthy of quotation:—"The first cause, or that in which the operation of the active forces of nature in these bodies (the sun and planets) is based, can be no other than reflection; *i. e.*, the reflection of the sun by the planets, and of the planets by the sun, and by each other." *Ergo*, the cause of a man's performing his work is his standing and gazing at it!

It is this attributing of obscure results to obscure causes, and the expression of it in jargon still more obscure, which occasions the success of these delusions; and against which there is no guard except in a right understanding of the whole doctrine of causes. Electricity and magnetism, words which are of frequent occurrence in this and in all writings of a similar nature, are not known to us as causes, but as effects, and not even as primary effects, but as modifications of the

effects of other actions, brought about by peculiar circumstances and peculiar substances; and neither of them can be said to be the cause of heat or of cold, any more than the simple fact of the falling of a rain drop or flake of snow, is the cause of the oxygen and hydrogen of which these are composed.

One object or event appears, of such a nature as to make a powerful impression on the mind; it is followed by another, which does the same; and these are immediately connected with each other as a cause and an effect. A dream and its fulfilment, a prodigy and a national calamity, and a thousand others that might be named, all belong to this putting of two occurrences in the relation of cause and effect, without any feeling of a relation of cause and effect between them. If we analyze all the errors of reasoning, and all the absurdities of belief, and of action as founded upon that belief, we shall find that the cause of the mischief lies in mistaking a mere sequence of occurrence for a case of cause and effect.

The error of the Nominalists has tended greatly to the perpetuation of this; and thus, the sceptical philosophy has been one of the chief supporters of that superstition which it professes to deride and explode. The reason is obvious: If there be nothing in causation but the simple fact that the cause precedes the effect in the order of succession, then there is no reason why any one event should not be the cause of any other—that, for instance, a crop of turnips should not spring up as readily after sowing gunpowder, as after sowing turnip-seed; or that the croaking of a raven should not cause the death of a human being, as soon and as certainly as the swallowing of prussic acid.

In fact, if we do not admit, and not merely admit, but feel, that there is a relation in the particular case, which

holds in all similar ones, but in no dissimilar ones, there is an end of all judgment, all reasoning, and all regulation of our actions; and we cease to be men, and are beasts,—lower than beasts, indeed; for we have lost our reason, and have not acquired their instincts.

This is the most vital point in the philosophy of mind, or in any philosophy in which human beings can be concerned. As regards the present life, it is a virtual denial of all knowledge, and a virtual abrogation of all the laws of morality and of society. It was this which led the truly excellent and pious Bishop Berkeley to deny the existence of matter, in his zeal for the proof of that of mind and of a Divine Being. As a strict Nominalist, he limited the whole case, of causation, for instance,—and it may be held as including every other into which a relation enters,—he limited it to the cause and the effect, the antecedent and the consequent as objects of the causes. But in doing this, be the particular sense that observes what it may, we must either concede mind to all animals that have senses, and so render mind quite unnecessary, or we must deny the existence of matter, and resolve the whole universe which appears to the senses into a mere series of mental perceptions. The first of them is the ordinary and natural result of Nominalism; and one might expect it to be so, for the evidence of our senses is really the strongest which we have, and that which we are least willing to give up upon any testimony. But Dr. Berkeley was much too pious for this; and then he was driven to the alternative of his ludicrous denial of the existence of matter.

But, when all the parts of the case of causation, of reasoning, or of any thing else in which there are antecedents and consequents, or premises and conclusions, are taken into account, the whole of the difficulty vanishes, and there is not

the slightest need for having recourse to the denial either of mind or of matter—for the sacrificing of a future state for the sake of the present one, or the sacrificing of the present for the establishment of the future.

Admit that the cause and the effect are such as can be perceived by the senses only,—as a man striking a stone with a hammer, and the stone against which that hammer strikes being shivered to pieces,—there is no subject of mental perception in either of these. The mind cannot see a blow given by a hammer, neither can it see a broken stone. But men have learned to make and use hammers for this purpose, which has never in one instance been done by those animals that are understood to have more acute vision than man.

Man must therefore see, in this process, and in many others which might be mentioned, something which these animals do not see. But by our hypothesis, or supposition, and also by the observed fact of the sharpness of sight in many animals—which having to depend more exclusively on their senses than we, must have at least as much sensal perception of any thing that comes within the range of their vision as we have; and, therefore, we could not make those applications of the exercise of sense, which they never attempt, unless we possessed something in addition to sight.

The addition which we have, is the perception of the relation,—a perception which is wholly mental, as there is no object of sense which answers to it. This relation is equally perceptible between subjects which are co-existent, and those which follow each other in the order of succession; and there is no more an object of the senses answering to the relation that we feel, in the one case, than there is in the other. There are corresponding differences, too, among

both classes of relations. Of co-existences, some are like, and others not like; and of successions, some are causes and effects, and others are not; and we may fall into error in either case, if we mistake the one of these for the other.

What we originally observe by the senses, and the mental feeling of relation which is consequent upon, and in addition to what the senses inform us of, may return to the mind in suggestion; and as these are, in reality, the results of only one effort of our compound nature, they return together; and the relation of them, taken as a whole, may return as one complex state of the mind, that is, as a succession of states so closely following each other, that we can feel no difference of time between them, when they return, whatever there may have been on their original occurrence. The cause may have been yesterday, or in a former year, or we may have been told of it as happening any length of time before we were born; and the effect may have been ever so long after; but, when they return to the mind as cause and effect, all the intermediate time is annulled, and they come in the closest sequence. Thus, a season elapses between the sowing of the corn and the gathering in of the crop; but the farmer sows again in as confident hope of a similar return from a similar end, as if the corn had grown and ripened at one part of the field, before it was sown at another. So, also, when a man cuts down an oak of a hundred years' growth, and plants an acorn, he never doubts that in another hundred years the oak which he has appropriated to his use as timber, will be replaced in the forest. It is the power which the mind has of bringing different subjects together without any regard to the length of time between their natural occurrence, which gives it so very great advantage over any possible exercise of mere sensation, be it as acute as it may. It is the same in the

matter of distance or space; for the one member of the case from which the relation is derived, may have occurred at the antipodes, and the other here, and the relation itself shall be as clear and intelligible as though both had occurred in the same spot at two consecutive moments. The prayer,—

> "Ye gods! annihilate both space and time,
> And make two lovers happy,"..

which has been so often ridiculed for its absurdity, is, therefore, quite philosophical, though quite unnecessary, in the case of the mental happiness of the lovers. It is unnecessary to trouble the gods about the annihilation of space and time; for, if the lovers are sincere, they not only may, but must do it for themselves. In fact, the greater part, if not all, of our mental enjoyment, is in the absent, either in space or in time; and were it not for the hope or the remembrance which is connected with it, the passing moment would be a weariness of the spirit not easily to be borne.

This power of condensation or concentration, which the mind possesses from its very nature—from the simple fact of its internal operations not being clogged by the properties of matter, would be a subject of great admiration and delight to us, if it were not so easy and in such constant practice that we never think of it, and are hardly aware of it. Not only can two subjects and the relation between them, come back to the mind in suggestion, as a single subject, to serve as one of the elements of a new relation; but a vast multitude of co-existent objects, or a long chain of successive occurrences, can come so rapidly in all its parts, that we have the same feeling, and can make the same mental use of it, as if it were only one. But, in order to do this, there must be some mental connexion

between the different parts—some relation which has been felt; for this is the tie by means of which the observed parts of our thoughts—these elements which we derive simply from the senses, are bound together.

By this means, subjects related, and the relations in which they are felt to stand to each other, recur to the mind together; and we can judge of the resemblance or disparity of relations, with the same certainty that we can judge of those of the objects of the senses. To the mind, indeed, they are essentially the same; for whether it be subject or relation, our mental feeling of it is nothing but a state of the mind.

Nay, we can carry the process much further than this; for, out of the suggested ideas which we have derived from the exercise of the senses, and the relations which we have perceived among them, we can form new combinations and trace new relations. For instance, out of a number of causes of which we know the effects, we can form the conception of a new cause of which we have had no former experience; and not only speculate about what are likely to be the effects of this cause, but be as confident of them as we can be of the effect of any single cause in a new instance, that we have seen performed in many previous ones. This is, in fact, the source of all contrivance, and the origin of all improvement, and of every thing new that is, or can be, said or done by human beings.

But as this is the highest, and, properly directed, the most useful of our mental occupations, so it is the most precarious in the management, and the most liable to error. We must thoroughly understand all the elements which we compound, and also all the new ones which shall arise from the fact of the compounding; or if not, we are never certain of the result; and it is this jumping to conclusions

without due knowledge of the premises, and of what those premises are capable, which is the grand source of error both in our reasonings, and in our attempts at invention, whether in the arts or otherwise.

Mental power will carry us a great way farther than any one can imagine; but it will do this only when we supply it with the proper materials. The mind can compare facts and discover relations, but it cannot invent either the one or the other; and let our process of reasoning, or our project of contrivance, be ever so perfect in all the other parts, one single error, either in subject or in relation, renders the whole of no value. It is the want of attention to this circumstance, which has enabled sophists of all degrees, and for all purposes, to impose so much upon the world as they have done; it is this which has introduced so many false theories into all the sciences, and so many erroneous practices into all the arts; and it is this which drives so many of those who give up their attention to mechanical improvements, to spend their lives in labour, and sink down into their graves in disappointment, leaving no memorial behind them but that of wasted time, and labour thrown away. Schisms among churchmen, and parties among politicians, if they do not originate in more objectionable motives, or are not kept up by an *esprit du corps* without any reasoning, are all reducible to this species of error and delusion; and, as in these very mixed and complicated subjects, with which the passions of men are very apt to mingle, the error is much less easily detected than in matters of pure thought, it often, indeed generally, happens, that both are in the wrong, and that nearly to the same extent.

SECTION XVII.

THE PROCESS OF REASONING.

THE remarks made in the conclusion of the preceding section naturally lead us to the consideration of the process of reasoning, which is the exercise of co-existent and relative suggestion jointly,—the general name for these purely intellectual states, of which the others are the component parts. As such, it is the summing up of the subjects treated of in the preceding parts of this volume: and it is the conclusion of the philosophy of mind, considered as intellectual, and without any reference to the passions, upon the analysis of which we do not purpose to enter.

It is, unquestionably, the most important branch of the whole subject; inasmuch as it is the process by which we arrive at the discovery of every truth, excepting such as are apparent to the senses. But it derives all its superiority from those subjects of which an outline has already been given; and it has been elevated to an importance which it does not deserve, and also made the subject of many mistakes. We shall not, therefore, dwell at any great length upon it; and we shall endeavour to point out some of the more general mistakes into which men have fallen concerning it.

Upon physical subjects, where an appeal to the senses can frequently be made, reasoning alone is a most unsafe

guide; and, accordingly, those sciences continued in a most imperfect, hypothetical, and necessarily absurd state, while the chief instrument in the philosophy of them was reasoning. Their improvement, and the wonderful revolution of all the arts and multiplication of all the accommodations of society, which are the results of that improvement, date their beginning from the introduction of the inductive method, in which the speculative notions of theoretical philosophers are allowed to get as little in advance of the facts as possible. This is done by observation and by experiment, in both of which, the body and the mind work together; and the consequence is that, upon all subjects in which matter is concerned, they work to far more advantage than either of them can do if it worked singly. If the body alone, then there would be no knowledge,—nothing but the fleeting sensation of the moment, gone—never to return; and then, if the mind alone, it would very soon break away from nature and truth, and bring us back to those dreams which formerly haunted the schools, or forward to other dreams equally vain, as we find to be the case with thousands of our own time who begin at the wrong end, and attempt to reason and conclude before they are acquainted with the premises.

The errors of Realism and Nominalism, on the subjects of general ideas and general terms, had long the most pernicious effects on the process of reasoning; and although in some other respects these errors were opposed to each other, besides their hostile opposition in the field of battle, their mischievous influence upon the process of reasoning was nearly the same. Indeed, it is of very little consequence whether the more general part of the argument, or major proposition of the Syllogism, as it is called, be a *universal à parte rei*, or a general term, if we assume it as

the foundation of our knowledge of something particular. In either case, we invert the process of nature, as, in fact, we derive the general feeling from the relation of certain resemblances among all the particulars that we generalize, and thus arrive at it before we can possibly give it a name; and, therefore, to turn round and make this generalization which we established by the particulars, and by them alone, the means of proving the truth of these very particulars, or any one of them, is really reasoning in a circle, or, more strictly speaking, not reasoning at all; and yet this is the sum and substance of that scholastic logic, which once kept the whole of the learned world in darkness, and the broad shadow of which is not yet wholly removed either from our colleges or our courts.

Syllogism, which was the form of this assumed irresistible mode of ratiocination, means "reasons which are *tied together*," so that if you admit the one of them, you dare not deny the other. There were many forms of it; for mind takes the impression of all forms, from the mouse to the elephant; but we shall take but one form, and give an example, as the most summary way of dealing with it.—We take the following—

SYLLOGISM.

Major. All men must die; but

Minor. John Brown is a man; therefore,

Conclusion. John Brown must die.

Now, in plain common sense, what is gained by all this sounding formality? Would not "John Brown is a man and must die;" or simply "John Brown must die," answer every question which is answered by the syllogism, or by fifty syllogisms, if idle ingenuity could frame so many upon so simple a proposition? But, take it on their own grounds, and see what strange work may be made of it. With the

Realist, the words, "all men," mean the "universal man," who, like Crambo's abstract idea of a Lord Mayor, is "without hands, head, feet, or any body," and of course there is nothing in him that can possibly die. Take the hypothesis of the Nominalist, according to which every thing that gets this name "man," must be included in the major proposition; and this being the case, we have a curious conclusion. The signs of public-houses have "The Green Man," and more rarely, "The Man in the Moon;" and thus, in that hypothesis, "The Green Man," or "The Man in the Moon" must die, would be good logic, whatever might be said of it as common sense.

There is another error springing from the fertile root of Nominalism, by which the doctrine of reasoning has been not a little clouded. It has been supposed that we reason *in words*, as well as learn truth in words; but neither of these is the fact. A semblance is, however, sometimes put on, and they who cannot, "for lack of knowledge," give reasonings, and yet will needs speak, do often attempt to satisfy your demand in these flimsy counterfeits. In common life, where people are but little accustomed to accurate trains of thought, not in the way of their particular callings, we may, in what is called "general conversation," expect and excuse this in a great majority of instances; and we have it in more quantity at certain popular courts and other meetings, where folks must speak for the sake of appearances, without very well knowing what they have to say. But if you would have a specimen of it in full measure, and to the utmost perfection, you must "suffer" a debate in the British House of Commons, upon some subject which requires that certain members should speak largely—at their constituents. There you shall hear the perfection of words

substituted for logic, in set speeches of a full hour each, in "tropes" of most thundering sonance, though neither the orators theselves, nor any one else, can form the slightest idea as to what all this "sound and fury" is about. It may be, however, that those displays answer two very important purposes:—First, the great mass of mankind are, as we hinted, more easily "taken by the ears," in proportion as that which they hear is more incomprehensible; and secondly, by letting the mind have its fit, upon such occasions, a calm follows, during which the real business of the country may be quietly done. In "another place," the treat is less exquisite; for the rhetorical climate is (if the term may be pardoned on account of its insignificance) less *tropical*, the members being, as one would say, "duchessed" down to more sobriety of speech. But, of these subjects enough; though they are far from being irrevelant to our main subject, which is to show that we do not reason in words, but in those thoughts which words are understood to communicate, whether the supposition be or be not correct in all cases.

Reasoning is altogether a mental process; and if we properly understand what is meant by Generalization, we also understand the process of reasoning, which is never effective to its purpose, unless when it proceeds upon the principle of induction, or from particulars, which are more easily understood, to generals, of which the understanding is more difficult. The process of generalization consists of three parts:—First, the perception, or the conception, of two or more subjects, which may be either actually existent as external, and known to us by sensation, or they may be imagined by us to be such,—again, they may be wholly mental, as in the case of those new combinations and results at which we arrive by mental operations exercised on per-

ceived subjects and felt relations; and these subjects may be either more simple or more complex, according to the nature of the particular case. Secondly, there is the feeling of the relation between or among those subjects, which is in all cases a purely mental process, and the only part of the matter which is so; and this is the part overlooked or omitted in the systems both of the Realist and the Nominalist; and the omission of which is the grand imperfection, or error, of both of these systems. Thirdly, there is the detaching of this from the peculiar subjects from which it was derived, the mental reception of it as a new idea, and the calling of it by a general name, which, though it adds nothing to the thought or knowledge which is in the matter, or in any way assists the original reasoner in arriving at that conclusion which is the object of his reasoning, and without which his labour would be in vain, is yet the means, and the only means, by which that result is communicated and preserved. On this account, the committing of the several parts of the reasoning to paper, as soon as they are satisfactorily established, is of great advantage to the party carrying on the process, especially if that process is a long and intricate one.

This method is of very great value when the reasoner is subject to interruptions, and intense mental application upon other subjects, before he brings his reasonings to a conclusion. In this way he becomes his own tutor; and the recorded portion of the process of yesterday becomes the lesson of to-day, from a mere glance at which he proceeds afresh. In the case of those who speak or write *originally*, as it is called, that is, who do not servilely borrow the words, or even the arrangements of others, —for all ideas must be borrowed from nature, or from the speech or the writings of others, and he who is original

does nothing more than compare those ideas in his own way, perceive the relations which arise from his own mode of comparison, and draw his own conclusions, —in the case of such, however, it is highly desirable, on a fresh return to the desk, especially if other study has intervened, to take up the argument, not at the point where it left off, but to go back upon it, and re-write until the mind again gets in full possession of the subject, and can bound over, and with that elasticity and delight, which are the very soul of thinking, and which, being purely mental, can neither be bought nor rewarded with money.

This is probably the cause why the reasoning powers of the British, as displayed in the speeches of orators and the works of authors, have not improved in the same ratio as the arts and their results. The rapid advancement of the one may have occasioned an apparent stagnation, or even retrogression, of the other, just as pedestrians going in the same direction appear to be lagging and marking time, that is, throwing out their legs without advancing, when one sees them from a coach in rapid motion. But this is not all; for we have the results to compare, and we cannot be mistaken in these. At the present day, for instance, we have no lack of sermons and other religious disquisitions; but where are the successors of Barrow and Butler, or even of Horsley, who was of later date, and too deeply embued with another spirit? There is no Pitt in the House of Commons now; our modern flowers are not the flowers of Burke; and among the liberal orators we seek in vain for a Charles James Fox, or for a Brinsley Sheridan among the wits. Taking more modern times, upon whom has the mantle of Canning or of Tierney descended? and where shall we look for the generalization of Francis Horner, or the calm and searching powers, both of

analysis and of synthesis, of William Huskisson? Truly, while we are startled and confounded by the marvels of mechanical art, we feel that our men of intellect have become a most shrunken and pigmy race. This, however, is a digression, though not an irrelevant one, and we must return,—lest we fall into the slough of our literary manikins.

A process of reasoning consists of nothing more than a series of comparisons, and relations procured from those comparisons, all of them taken in such an order as that they may bear upon a certain subject as the result and use of the whole. This object may be the discovery of some general truth, or the establishment of some proposition desired to be true, for the instruction and gratification of the reasoner himself; and this is the simplest application, and the one which is most successful. If a man reasons fairly and honestly, he is always sure to convince himself, even though his positions and conclusions are, in truth, as unfounded and absurd as can possibly be. In some cases this is to be regretted; but it is, in all probability, advantageous upon the whole, as a man doubting his own conclusions, without the evidence of any new knowledge to shake them, would be in a most discouraging position.

But though a man does not require to convince himself of the truths of his own conclusions by reasoning, any farther than by going over the process anew in order to see whether he has fallen into any mistake either of subject or of relation; yet he must reason before he can turn those detached portions of knowledge which he has acquired by observation, or through the medium of language, to account; for we often find that the man who has got possession of the greatest number of facts, is least capable of making use of them. The reason is obvious: if the mind is constantly occupied in receiving intelligence through the

eyes and the ears, it has no time to "set its own house in order;" and thus one greedy of gossip, or prone to devour all novelty that comes in his way, can seldom state a general truth worth listening to. The newspapers and other ephemeral publications in scraps, which come upon the mind like locusts, and consume all its vigour, have done incalculable mischief in their way; and perhaps nothing has tended so much to lower the tone of the public mind as the perpetual recurrence of this species of gossip.

I remember a case of four professional gentlemen whose avocations afforded them a great deal of leisure, and who spent an hour or two on most days of the week in walking and conversing together. Two of them were most voracious readers, and devoured every newspaper, every magazine and review, and very many of the new books. The third was not quite so voracious, but he had a leaning that way; and the fourth could hardly be said to be a reader at all; for he went apparently dodging and dreaming about, never frequenting the reading-rooms, or being seen with a book in his hand. By the people of the place, the two novelty-mongers were looked upon as oracles of wisdom, and consulted upon many occasions as such; the man of moderate desire for novelty was less publicly consulted; and nobody would have asked advice of "the idle man who never reads." But among themselves the case was very different. In all matters of doubt and dispute, the third man was applied to by the first and second as arbiter, and if they were not satisfied with his arbitration, the silent man was appealed to as umpire, and his decision was regarded as final. It is highly probable, nay, it is certain, that this fourth man derived his information from the conversation of the others; and that, while they were simply pouring forth what they had read or heard, the silent man was

tracing the relations, building up the parts to synthetical conclusions, and when he was asked he was prepared to retrace his steps by analysis, and convince his companions that his conclusions were fairly borne out by the premises. The third man was a sort of medium between the first and second, and the fourth. He was the real philosopher, and he still holds an important situation, and is one of the clearest-headed men in these Islands. The first and second floated off upon the ordinary current of society; and the fourth sunk in his silence, and has probably quitted the world.

This notice of these four men, on the truth of which the reader may depend, throws no small light upon both the using and value of reasoning. At the beginning and end of the series, we have the parts of the progress separated; and in the third man in order we have them combined. If the first and second could have worked up their knowledge, they would have been first-rate men; and so would the fourth if he could have collected his own materials, and connected his powers of reasoning with the events of the time; but he who combined the two was the man to advance both in status and in usefulness, and the event has established the fact.

The proper and legitimate use of reasoning is the convincing of others of the truth; and one regrets that it should ever be prostituted, or rather counterfeited for ignoble ends,—but this must always be the case while men are hired to reason, or while they use it to accomplish in an oblique manner that which the common sense of mankind would spurn with indignity if it were openly avowed.

There are two forms of this, premeditated and extempore: the one a comparatively easy matter, the other one of the severest, if not the highest, of mental exercises, and therefore, the one for which every man ought to be, at least in some degree, prepared.

By "premeditated," I do not mean that the reasoner should spout what he has "conned by rote," or copy the speeches or writings of himself or others. Such merely mechanical labour is not entitled to the name of reasoning; for all the reasoning has been performed by the holder forth, or by others, before he comes to make his exhibition; and, therefore, he comes to his task with all the tameness of a pioneer.

All that is intended is, that the man has prepared his synthesis, and got out his general points, so that he has the skeleton of his subject in his mind. This gives him confidence, and also some command over the assembly or other public audience that he addresses, which are not possessed by the mere reader or spouter of an oration completely prepared. Nothing remains for him to do but to enunciate his subject and proceed with his analysis, in the order of the points which he has chosen and established by his synthesis. In doing this, he can work down and illustrate his points, until he reaches the understandings of those to whom he addresses himself, of whatever order these may be; and, after he has once won the understanding, he can round his point with a flourish, and carry the feelings by a *coup de main*. This is especially useful, as it arouses and warms the hearers, and keeps them on the alert, during the more abstract portion of the next point, and until that has also been worked down to the level of their understandings. When we say "level," we do not imply that the parties addressed are either generally, or on the subject of the particular address, necessarily inferior to the party addressing them. The fact may be the reverse; and were it not invidious to name places and persons, we could easily point out assemblies in which the most ignorant men are the most frequent, the most lengthy, the

most vehement, and to the ears of the vulgar, the most effective speakers. This is the case with those persons called "mob orators," wheresoever they have their arena. But still, even the more talented are not supposed to be in the possession of the particular view which the orator takes of his subject; and he of course wishes to bring it home to them with all the effect that he can, which is to be accomplished only by convincing their understandings and carrying their feelings, and consequently their attention, along with them.

But when all the parts are thus established, the task of an accomplished and effective reasoner is so far from being completed, that the most important part of it—that which gives power and effect to the whole—yet remains to be done; and it is here that a master spirit shows its superiority. By the analysis, the subject is dissected bone by bone, and though each of these may be ever so well demonstrated in the reasoning, and recommended in the flourishes, the bones mus be put together, and the working of the whole shown to be that which was enunciated in the exordium or opening of the speech. If this is not done, the whole speech is really nothing but declamation, varying according to the ability of the speaker, but still only declamation.

The loose declaimer merely scatters words—"sows the wind;" and thus there is nothing which any body can gather in but "the whirlwind," and that is the usual peroration, which he not unfrequently raises to a perfect hurricane, which blows clean away from the audience, not only that with which the orator means to grapple them withal, but even the former knowledge which they had of the subject; and if they are persons who have not been accustomed to reasoning, they are blown away from all sense and reason, and goaded on to the performance of deeds, of

which themselves as well as others bitterly repent. This is the grand means by which demagogues of all ages have done so much mischief; and were it but for the prevention of this, it were desirable that the great body of the people were a little schooled in the science of reasoning, and those affections of the mind which are the foundations of that science.

The more clear declaimer sows the better seed, but he fails in not gathering it in. He establishes his individual points well and forcibly, and often brings a mass of most effective illustrations to bear on the single point; but he "throws wide," and cannot so collect his points, how well soever he may have managed them individually, as that they help the main subject with more than a small portion of their individual power. Lord Brougham, in the days of his strength, was a very eminent instance of this. No man was more mighty on a point, especially a vituperative point; but he ran them down until they could not return; and thus, he always made more for the captivating of the popular ear, than he did for the question of which he was the advocate. Tierney was the counterpart of this; his points were small and subtile; but he had consummate skill in binding them so closely into bundles, that their effect was immense; and when his cause was reasonably good, and he threw himself wholly in it, he left his antagonists little more to say than "*we wont agree* with you."

But, granting the utmost power and tact both in the analytical establishment of the points, and the synthetical concentration of these upon the main subject, the reasoner from premeditation still labours under some disadvantages, which he who addresses himself extempore can avoid. He who has even his synthesis prepared, is tied to his points though not closely to the manner of treating them, as is

the case with the by-rote spouter. Still they trammel him; and he cannot shape his general course so well to the temper and feelings of those whom he addresses, as the man who has the whole field clear before him.

The extempore orator can regulate the choice, as well as the management, of each point, by the effect which the preceding ones have produced: and thus he is able to avoid one of the greatest evils to which an orator by premeditation is exposed, especially if the oration is a long one,—that is, he can not only keep up the interest to the close of his analysis, but increase it as he goes along, which cannot well be done by one who has all the points fixed in an order from which he does not feel himself at liberty to depart. We are not to suppose, however, that even the extempore orator comes to his work in ignorance of his subject, or of those collateral subjects from which the illustrations of it are to be derived. Quite the reverse; for he stands in need of more general, as well as more perfect information than the other. This is no task for a tyro in reasoning, or for one who has to glean his information specially for the case upon which he is to speak. The mind must be both well-informed and well-disciplined; and, as this is the description of mind which is by far the most valuable, to the owner himself, and to society, and to the world, it is that to which all mental education should be first and chiefly, and most assiduously directed.

Among public speakers, we find the clearest evidence of this higher power of reasoning in the case of a reply. It is true that the different speeches to which the reply is to be made, form a sort of skeleton of what the reply ought to be; but still, what they furnish in the ardour of a debate, is so very unlike what a man plans for himself in the placidity of his closet, that we have always better evidence of a

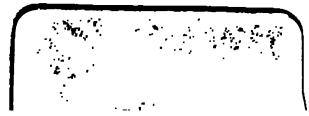
man's powers in his replies than in his opening speeches—he himself has the making of the latter in his own power; but he must take up the former in the way in which it is given to him by others; and thus, though he has not the very same difficulties to encounter, or field for display, as the orator who comes to the original arguing of a question in his own strength, yet he makes a close approximation.

We have taken the case of an argumentative public speaker, as being the one which gives the fullest scope for the process of reasoning, and brings both the greatest honours and the highest pecuniary reward to the reasoner. But, though we have taken this as the case for illustration, the very same principles apply to reasoning of every kind—whether authorship, the common intercourse of society, or the fact of a man arriving at truth by the exertion of his mind, simply for his own information and improvement. The materials are, in every case, either substances or occurrences observed by the senses, or they are relations which have been mentally perceived from the comparison of one subject with another. Observation, or experiment in cases where it can be resorted to, may discover many qualities in a substance, many causes conspiring to produce an effect, or many effects resulting from one and the same cause; and any one of each of these may be one of the members of that comparison by means of which a relation is caught. Whether there is or is not a relation between any two subjects, and if a relation, what that relation is, depends on the nature of the subjects themselves; and before this can be ascertained, the subject must be known. Hence, as has been already hinted, and it cannot be too often repeated, there can be no reasoning without knowledge, and no extensive or efficient reasoning without extensive and accurate knowledge. There must also be some similarity in subjects before they can

have a relation which can be turned to useful account in reasoning. Thus, there can be no useful relation of co-existence between a substance and a quality, or between extension in space and duration in time, although, through the medium of other subjects, these may become the measures of each other; and thus, a third subject may enable us to institute a kind of secondary relation in cases where no primary one subsists. In this way, we are very often helped to our conclusions by means of subjects which, at first sight, appear to have really nothing to do with the case, and which have really nothing to do with it farther than as the mind has the power, the faculty, or whatever else it may be called, of tracing those secondary relations between them. Thus, the turning round of a bit of stick between the hands, with the point of it pressing against a piece of dry wood, has at first sight no imaginable relation to the broiling of a fish; and yet this is the means by which men in a rude state of society procure those fires, by means of which they dress their food, warm themselves, and perform all other operations in which fire is necessary.

In like manner, the stars, which are more distant from us, not only than instruments can measure, but than imagination can fancy, have no relation whatever to the magnitude of that little globe of matter upon which we dwell; and yet they are the means by which the magnitude of the earth is ascertained, and made the measure of all distances in the heavens, and the magnitude of all the heavenly bodies, in as far as these are ascertainable, are ascertained. In like manner, the apparent distance of the moon from any star, as both are seen from the earth, has originally nothing to do with the place of a ship upon the ocean; and yet the accurate observation of this distance is the ordinary means by which the mariner finds his longitude.

Examples of the advantages of these secondary relations might be multiplied almost without end, for all the sciences and all the arts consist of little else but such and their applications. An instance or two more may, however, be mentioned, in order to show the great practical advantages which we derive from our mental capability of following out those secondary relations. A few bushels of coals, and a few pitchers of water, have, to the perception of those who are unacquainted with the matter, no relation whatever to the fetching of water from the bottom of a mine a hundred fathoms in depth, to the putting of ten thousand wheels in motion in a manufactory, to the carriage of goods and passengers at the rate of thirty miles in the hour, or to the printing of a book with no farther human labour than the feeding of a machine with sheets of paper at one part and the receiving of those sheets printed and ready for reading at another. But these, and far more than these, have been accomplished by the application of those secondary relations, which the efforts of mind alone can discover; and that in one very limited and comparatively simple portion of that field which has been kindly given to the mind for its contemplation, and the store out of which it is to minister to its own improvement, and to the accommodation and comforts of the body. The subject might be prosecuted through many pages—many volumes; but enough has, we trust, been said, to show that the study of mind is the most important in which that mind can be employed.

THE END.

W. L. GRAVES & CO., PRINTERS, LONDON.